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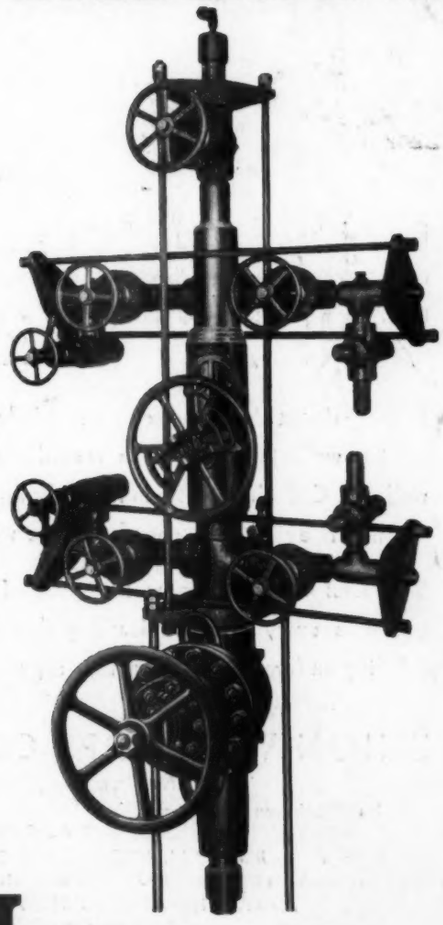

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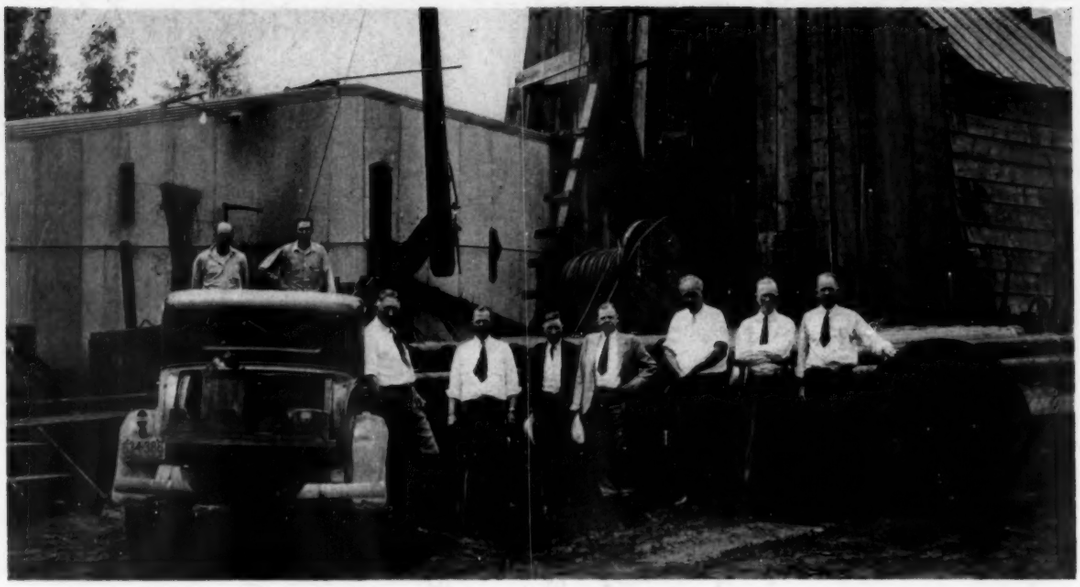

The men above, left to right:
Chas. Banks, Tooldresser.
Dee Dougherty, Driller.
F. A. Donaldson, Union Wire Rope Corp.
A. H. (Andy) Corbin,
Jarecki State Representative.
Chas. Dougherty, Contractor.
A. E. Butterfield,
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The "ULTIMATE LOW COST WIRE ROPE"

THE OIL AND GAS JOURNAL

Volume 32
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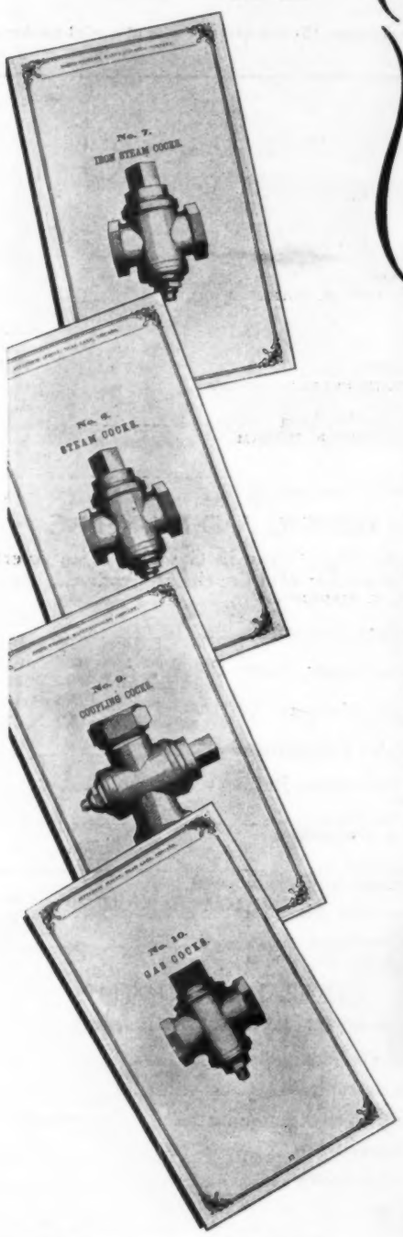
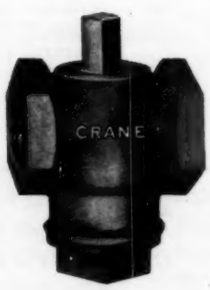
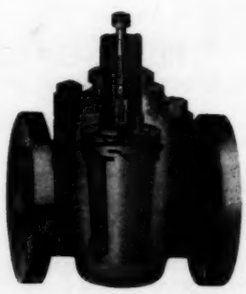


The old adage, "Experience is the best teacher," applies to most things including the manufacture of valves.

Reproduced here are pages from a catalog of 67 years ago showing plug valves (they were known as cocks in those days) manufactured by Crane Co.

Shown also is one of the latest types of Crane Lubricated Plug Valves for oil, water, gas, gasoline, and air lines. Embodied in them is the sum of all the knowledge and experience gained in the 67 years that have passed since the making of those early valves.





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Minimum of $1.11 a Barrel for 36 Gravity Crude Probable if Government Decides to Fix Price

By ANDREW M. ROWLEY

SOME definite announcement as to the government's attitude towards fixing prices in the petroleum industry is expected from Washington this week. It is understood exhaustive research shows the actual cost of recovering crude oil in the Mid-Continent area is $1.11 per barrel for 36 gravity. That price does not include any profit on the average operations. Consequently, if the government does decide to set a base price for the raw material, such a price should be a minimum of $1.11 per barrel for 36 gravity.

It is believed the government is reluctant to fix prices and it is felt such action would be without definite, stable results unless production were absolutely under control. A step in the right direction was taken when production allocations were reduced. Of more importance, however, is to make the allocations effective and to reduce crude oil production in every section of the United States to the quotas allowed.

There can be no incentive to better prices as long as more crude oil is being produced than is actually being consumed. Nominations do not mean consumption. And an actual balance between supply and demand would not cause a natural increase in prices. It requires an output somewhat less than real demand to make a sound, strong and rising market.

If the petroleum industry is to do its full share in making the NRA a success, it must have prices not only for crude oil but for the refined products which will permit it to pay the additional expenses incident to operation under the code and provide a reasonable profit which can be used to replace worn out material and equipment. With the enormous losses suffered during the past few years oil companies' inventories of equipment and supplies have reached a vanishing point. Most other large industries in this country will benefit greatly from placing the oil industry on a profitable basis because the oil business is one of the best customers of other industries.

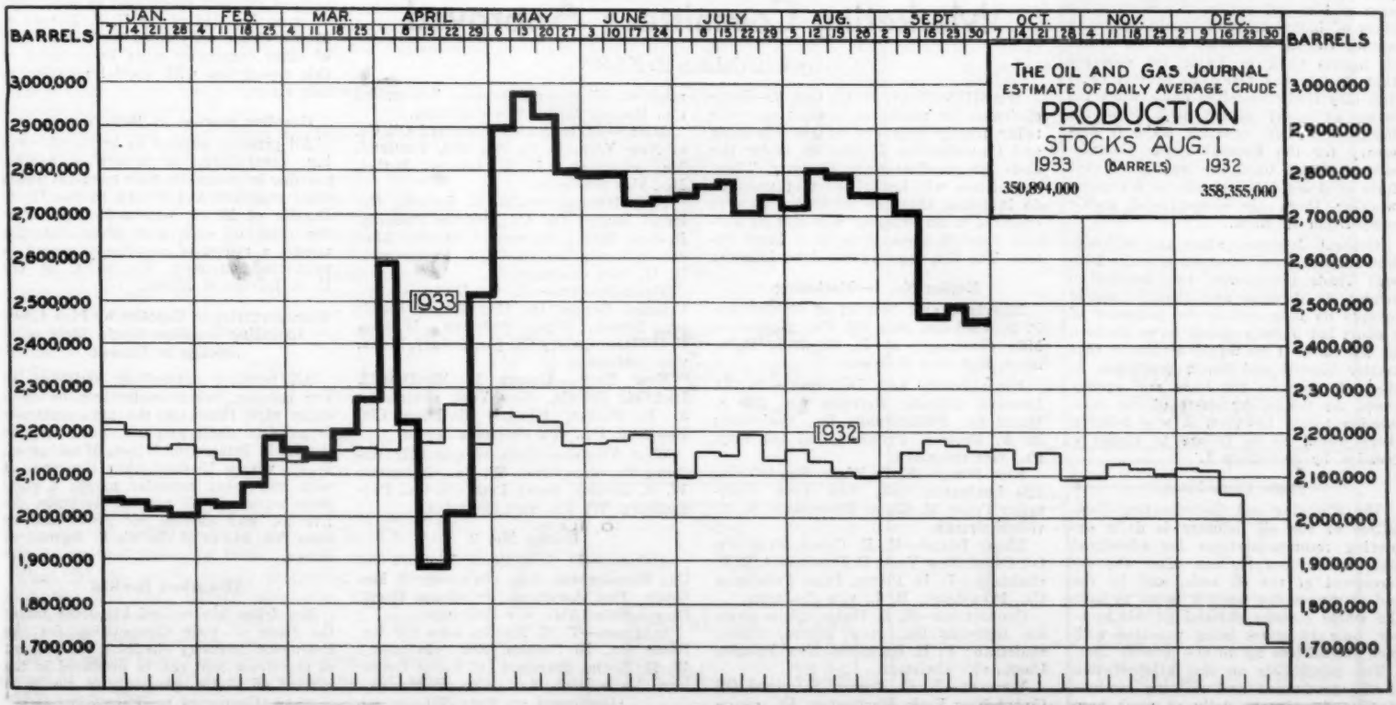
Oil men naturally feel relieved over recent advances in crude oil prices but so does a drowning man who manages to keep himself afloat. Prices in every branch of the petroleum industry should be at such a level as to permit profitable operations. Any other condition absolutely prohibits successful operation of the NRA in the oil business at least.

Crude Oil Production in the United States

Estimated daily average production for the week ending September 30, and a comparison with previous week and one year ago, follows:

	Sept. 30	Sept. 23	Oct. 1, 1932
Oklahoma—			
Oklahoma City	212,500	235,960	70,455
Seminole-St. Louis	102,040	126,995	109,260
Remainder of State	213,130	215,810	206,405
Total Oklahoma	527,670	578,765	386,120
East Texas—			
Lathrop	211,816	200,078	146,105
Kilgore	153,957	145,425	112,541
Joiner	137,354	129,742	120,562
Total East Texas	503,127	475,245	379,208
West Texas	127,645	128,615	170,327
North Central Texas	74,905	74,958	73,643
Texas Panhandle	44,577	43,717	44,010
East Central Texas	46,239	46,110	52,051
Gulf Coast—Texas	185,468	185,055	137,212
Southwest Texas	46,745	44,715	58,936
Total State of Texas	1,028,706	998,415	915,387
Kansas	121,635	127,315	99,915
North Louisiana	25,795	25,680	30,100
Gulf Coast—Louisiana	47,835	48,515	33,586
Arkansas	32,440	32,650	34,395
Eastern Fields	126,000	127,000	114,000
Rocky Mountain area	81,310	81,610	72,197
California—			
Santa Fe Springs	47,250	48,750	59,750
Long Beach	57,750	64,500	71,500
Playa Del Rey	10,150	10,600	14,250
Elwood	14,500	15,500	13,750
Kettleman Hills	63,750	60,500	59,000
Remainder of State	282,500	274,900	256,750
Total California	475,900	474,750	475,000
Total United States	2,467,291	2,494,700	2,160,700

Decrease 27,409 Bbls. Daily.



Ickes Considering Price Fixing at Service Stations If Price Cutting Practices Are Continued

By CHARLES E. KERN
Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., Oct. 2.—Secretary Ickes, of the Department of the Interior and oil administrator, is reported slowly moving toward fixing the price of gasoline sold at service stations and he will fix the price unless oil companies discontinue price cutting. Today reports of price cutting continue to pour into the oil administrator's office.

Secretary Ickes has sent letters of inquiry to obtain facts about the movement of petroleum, quantities in storage and various conditions to make his knowledge of what is taking place in the industry as complete as possible. Oil men in closest touch with the oil administrator declare that his most prominent trait is desire to know the facts and that he will not act until he is fully convinced that the industry cannot regulate itself. However, indications tonight are that, perhaps during the coming week, he will decide there is no other way out of the present dilemma than to handle the oil problem with a firm hand and exercise the power Congress has given the President.

Lease and Agency Issue

The Federal Trade Commission, which is endeavoring to determine the legality of lease and agency contracts, was approaching a decision a week ago, when a new feature of that problem came up in the form of information that a number of oil companies, some of them in the major class, were changing these contracts to a license form for the purpose of avoiding responsibility for damages and to get out of the chain store class of industry. While their lease and agency contracts provide that the lessee or agents shall be liable for damages that system has failed to protect them and they find themselves liable when the lessee or agent cannot pay. Now the licenses they are creating make it necessary for the Federal Trade Commission to decide upon the legality of that form of doing business and to determine whether there are elements of unfair competition in them.

General Johnson, when the oil code was adopted, said he would give the Federal Trade Commission two months to render its decision and that he would accepts its judgment as the judgment of a court but if there should be no decision by November 1 he would determine that matter himself and insert provisions in the code to care for lease and agency cases. At the headquarters of the commission today, however, it was believed there would be no failure to render a decision by November 1.

State Committees

The Planning and Co-ordinating Committee of the oil industry is daily expecting recommendations for additional state committees to look after the enforcement of the oil code, and by the end of the coming week it hopes to have the whole country covered in this manner, only 13 states being provided with such committees up to the present time.

The committees on the interpretation of the production and refining sections of the oil code are daily at work here and before the end of another week they are expected to report to the Planning committee, members of which are in close touch with their work, so that a prompt decision may be expected.

Dr. George W. Stocking, professor of economics at the University of Texas, now on leave to serve as a staff member of the Committee on Government Statistics and Information Service, and Dr. Gardiner C. Means, economic advisor to the Secretary of Agriculture, has been appointed by Gen. Hugh S. Johnson a member of the Consumers' Advisory Board of the NRA. Doctor Stocking, the NRA administrator says, "will contribute to the board an expert knowledge of the oil industry and of consumer problems as they arise from the oil code. He is author of 'The Oil Industry and Its Relations to the Competitive System,' based on field experience and his years of economic research."

Calls for Reports

Mr. Ickes has issued an order calling on the oil industry to furnish information on crude petroleum stocks, crude petroleum report by refineries, monthly crude petroleum, monthly refinery reports, gasoline storage at bulk terminals and transportation of gasoline by pipe lines.

With this information on hand the oil administrator will know the exact conditions he is dealing with and will be enabled to exercise powers Congress has given the President for control of the storage and movement of petroleum and gasoline.

Secretary Ickes' order follows:

Pursuant to Section 10 (a) of the National Industrial Recovery Act (Public No. 67, Seventy-third Congress) and Article 7, Section 6 of the Code of Fair Competition for the Petroleum Industry, as approved by the President on August 19, 1933, and as amended and approved by the President on September 13, 1933, and in accordance with the executive order of August 28, 1933, I hereby require that the following information be furnished the Department of the Interior, as the Federal agency designated by the President under the aforesaid Code of Fair Competition:

Crude Petroleum Stocks Report

All persons, natural or artificial, holding crude petroleum in storage, shall complete and return to the U. S. Bureau of Mines, Washington, D. C., not later than the fifteenth day of each and every calendar month a report of total crude inventory on hand the last day of each calendar month, including net stocks of crude petroleum held in the custody of the reporting natural or artificial person, regardless of ownership, as well as all domestic crude petroleum in transit by water or tank cars, as prescribed on form No. A-947 of the Petroleum Administrative Board of the Department of the Interior. All such persons doing business east of California holding crude petroleum stocks of 100,000 bbls. or more shall report weekly the total stocks indicated by (*) on the aforesaid form A-947, which information shall be forwarded by telegraph or transmitted by air mail, special delivery letter, or otherwise, so as to be received by the U. S. Bureau of Mines, Washington, D. C., not later than 9 o'clock each Tuesday morning.

All such persons doing business in California and holding crude petroleum stocks of 100,000 bbls. or more shall report weekly the aforesaid stocks, which information shall be forwarded by telegraph or transmitted by air mail, special delivery letter, or otherwise, so as to be received by the office of the U. S. Bureau of Mines, Custom House Building, San Francisco, Calif., by 9 o'clock on each Tuesday morning.

Crude Petroleum Report by Refineries

All refineries shall complete and return to the U. S. Bureau of Mines, Washington, D. C., within 15 days after the close of each and every calendar month a report of crude petroleum received at each and every refinery owned, operated, or controlled by the reporting company, together with a balanced statement of supply and demand, as prescribed on form A-943 of the Petroleum Administrative Board of the Department of the Interior.

Monthly Crude Petroleum Report

All persons, natural or artificial, in any manner operating or controlling pipe lines for the transportation of crude petroleum, and all other persons, natural or artificial, holding stocks of crude petroleum on leases or tank farms shall complete and return to the U. S. Bureau of Mines, Washington, D. C., within 25 days after the close of each and every calendar month, a monthly crude petroleum report, as prescribed by forms No. 947 and 947-A of the U. S. Bureau of Mines.

Monthly Refinery Report

All persons, natural or artificial, in any manner owning, operating or controlling petroleum refineries shall complete and return, within 25 days after the close of each calendar month, a report of refinery operations as prescribed on form No. 943 of the U. S. Bureau of Mines. Crude oil refined for the account of other companies must be included in this report but with special notation to this effect.

Gasoline Storage at Bulk Terminals

All persons, natural or artificial, owning, controlling, or otherwise holding gasoline in storage at bulk terminal plants shall complete and return to the U. S. Bureau of Mines, within 15 days after the close of each and every calendar month, a report of gasoline so stored as prescribed on form No. 943-C of the U. S. Bureau of Mines.

Transportation of Gasoline by Pipe Lines. Including Gasoline Stocks Held in Storage or Transit

All persons, natural or artificial, in any manner owing, controlling, or operating pipe lines for the transportation of gasoline shall prepare and return to the U. S. Bureau of Mines, Washington, D. C., within 15 days after the close of each and every calendar month a complete report of all gasoline receipts, deliveries, and stocks, as prescribed by form No. 943-D of the U. S. Bureau of Mines.

Allocations Revised

Mr. Ickes has revised his order under the Code of Fair Competition for the Petroleum Industry changing the amount of petroleum that can be produced in the several oil states, generally in the form

(Continued on Page 32)

Chairmen and Vice Chairmen of State Marketing Committees Approved

By CHARLES E. KERN

WASHINGTON, D. C., Oct. 3.—State chairmen for marketing committees were today finally approved by the Planning and Co-ordinating Committee under the Code for the Petroleum Industry. These committees will have important work to do in seeing that the marketing code is executed in an efficient way and its success depends upon them to a large extent. The list, approved to date, follows:

Region No. 1—Marketing

Maryland and District of Columbia—P. S. Cochran, Sun Oil Co., Baltimore, Md., chairman; A. B. Gardner, Baltimore, Md., vice chairman.

Pennsylvania and Delaware—R. D. Leonard, Atlantic Refining Co., 260 S. Broad St., Philadelphia, Pa., chairman; R. A. Browne, Pennzoil Co., Oil City, Pa., vice chairman.

New Jersey—K. R. Ware, Sun Oil Co., 420 Lexington Ave., New York, chairman; Tyson M. Kline, Bloomfield, N. J., vice chairman.

Rhode Island—E. E. Cowie, Standard Oil Co. of New York, E. Providence, R. I., chairman; L. D. Pierce, Penn Petroleum Co., Providence, R. I., vice chairman.

Connecticut—N. C. Dodge, Cities Service Refining Co., New Haven, Conn., chairman; F. E. Rackliffe, New Britain, Conn., vice chairman.

Vermont—B. O. Foster, Standard Oil Co. of New York, Burlington, Vt., chairman; G. H. Stuart, Colonial Beacon Oil Co., Boston, Mass., vice chairman.

Maine—D. G. Smith, Standard Oil Co. of New York, P. O. Box 936, Portland, Me., chairman; L. L. Carver, Bethel, Me., vice chairman.

New Hampshire—R. F. Lybeck, Colonial Beacon Oil Co., Statler Building, Boston, Mass., chairman; Stanley Holden, Atlantic Terminal Co., Portsmouth, N. H., vice chairman.

Massachusetts—J. C. Richdale, Jr., Colonial Beacon Oil Co., Statler Building, Boston, Mass., chairman; William C. O'Mara, Quincy Oil Co., Quincy, Mass., vice chairman.

New York—George P. MacDonald, Richfield Oil Co., New York, chairman; J. B. Fisher, Kendall Refining Co., Bradford, Pa., vice chairman.

West Virginia—John Wright, Elk Refining Co., Charleston, W. Va., chairman; W. A. Jackley, South Penn Oil Co., Parkersburg, W. Va., vice chairman.

Region No. 2

Alabama—D. L. Gilland, Wofford Oil Co., Birmingham, Ala., chairman; J. McCrory, Pan American Petroleum Corp., Birmingham, Ala., vice chairman.

Arkansas—T. M. Martin, Lion Oil Refining Co., El Dorado, Ark., chairman; W. H. Evans, Standard Oil Co. of Louisiana, Little Rock, Ark., vice chairman.

(Continued on Page 36)

Tax Collector Gets More From Gasoline Than the Producer and Manufacturer Combined

By W. T. ANDERSON

Gasoline is one commodity that can justify an increase in price. Since 1926 the trend has been steadily downward until it reached a point where it was selling far below cost.

Cases were actually reported where a refiner sent a check along with his gasoline to have a distributor take it off his hands under contract.

Nor was this era of low prices accompanied, as in so many other commodities, by inferior product. The standard of gasoline quality has never been higher.

Meanwhile the producer of crude oil and the refiner were getting less and less for their product, those who had invested in the oil business were going into the red, those who were employed in the industry were forced to share work to give employment to their fellows. Great and small communities throughout the oil regions suffered because of conditions in the oil industry; oil-producing states which depended upon the revenue from oil for the bulk of their revenue were obliged to increase the burden on the taxpayers to make up the shrinkage.

Besides the general world wide depression those engaged in oil suffered a subdepression of their own due to conditions existing before and intensified through the unsettlement of the past four years.

Any attempt at recovery in the oil business meant a greater effort than in any other because of its particular difficulties. It meant also necessity for a longer step to rise to normal.

With crude prices 75 per cent below normal a rise of 250 per cent would carry it only back to 89 cents. From 25 cents in June to $1 in September must be considered from a minus basis and not by a plus sign. It represents how far oil had fallen, not how much it has risen.

Facts Unknown to Public

These are facts unknown to the general public which sees only the advancing prices at the filling station. People jump to the conclusion that they are being gouged, as they do in all cases where prices of anything are advanced, but especially so in the case of gasoline where wide fluctuations have prevented the public from having any standard of value in mind.

They think of the low prices as normal and any increase as profiteering.

A glance at the illustrations on this page will show how absurd this notion is.

One diagram shows where your gasoline money went in 1926 and the other where it goes today.

It will be seen that, when gasoline at the filling station cost 23.26 cents in 1926 the oil industry, represented by the producer of crude oil, the pipe line which transported it to the refinery and the manufacturer who made it into motor fuel, received 10.31 cents a gallon for all their investment and cost of operations. This year their return has shrunk to 5 cents a gallon.

Adding to the cost of producing, transporting and refining oil, the cost of marketing and distributing gasoline at every cross roads and almost every street intersection and we find that the total return to the oil business in 1926, a normal year, was 17.92 cents a gallon while today it is but 11 cents a gallon.

Freight in each period is put at 3 cents, making the comparison 20.92 cents without tax in 1926 and only 14 cents a gallon in 1933.

That is, the oil business, including the crude producer, pipe line, refiner, marketer, filling station and railroad, get approximately 7 cents a gallon less than in 1926.

On the other hand the collector of gasoline taxes gets 5.64 cents a gallon now where he got only 2.34 cents in 1926.

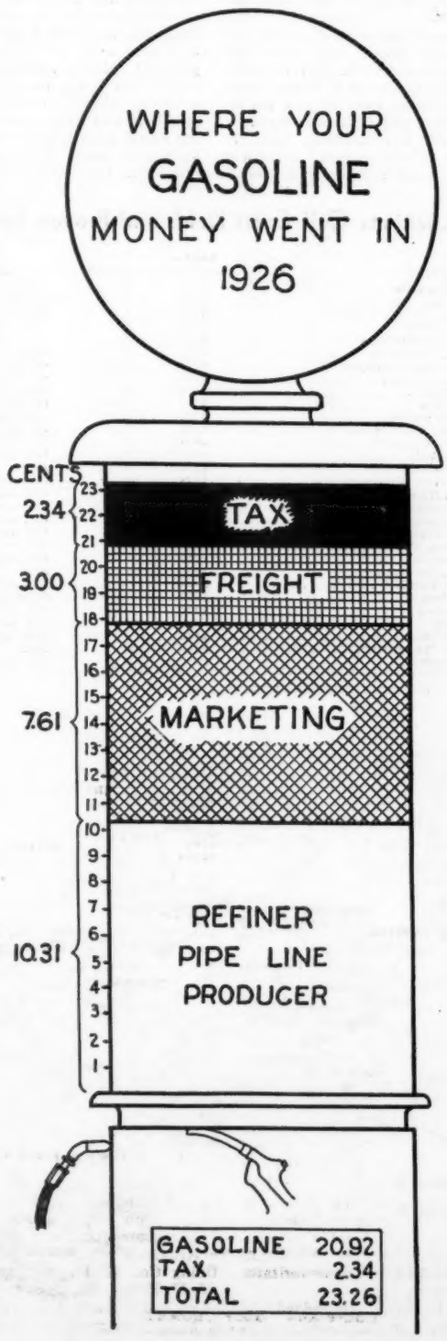
Taxes and freight, together account for 8.64 cents of the present price of 19.64 cents a gallon at the filling station. In 1926 taxes and freight amounted to only 5.34 cents.

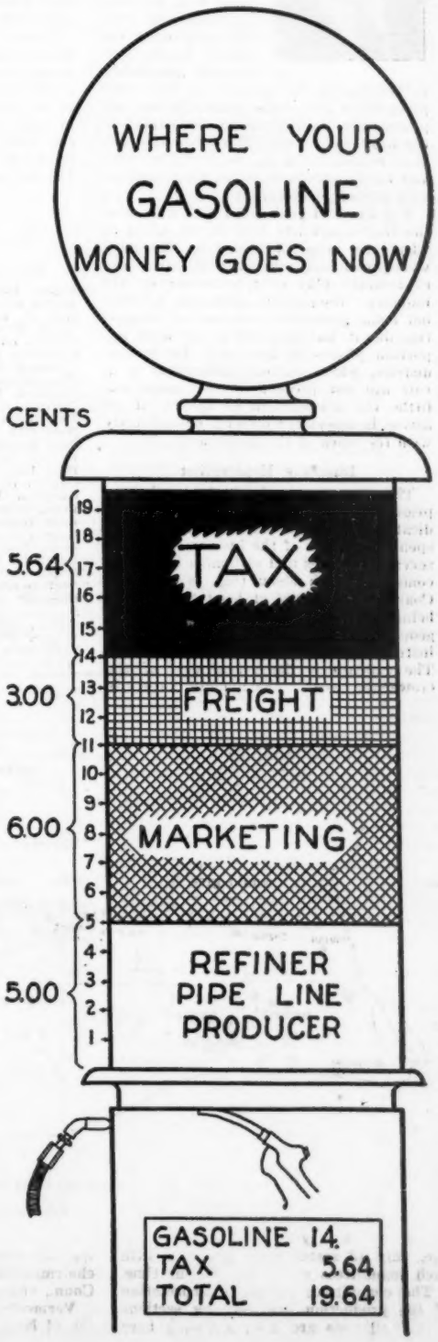
The oil business, less taxes and freight, is getting 6.92 cents a gallon less today than in 1926 while taxes and freight are taking 3.30 cents more from the gasoline consumer.

This accounts for the fact, which should be made plain to every motorist that while the price of gasoline is advancing the oil business itself is getting much less than it did in the normal year of 1926 when there was no complaint about gasoline prices and that the difference is in the increase of taxes levied on gasoline by state and nation.

Moreover the price today is 3.62 cents less than it was in 1926 and 1.86 cents a gallon less than the average cost during the 20 years from 1913 to 1933.

This includes the increase in taxes.





Sixty-three Discoveries of Pools on Gulf Coast Are Credited to the Use of Geophysics

By NEIL WILLIAMS
Gulf Coast Bureau, The Oil and Gas Journal

HOUSTON, Tex., Oct. 2.—The confidence of Gulf Coast operators in the belief that there remain additional large potential oil reserves yet to be uncovered in this district is reflected in the continued intensive geophysical exploration under way on the coast. The fact that this territory has been gone over, not only once, but many times, supposedly thoroughly, in the search for salt domes and other prospective new fields evidently has not placed any limitations on the extent of the work, but on the other hand what has been accomplished in the previous work and the information gained have inspired even greater exploration.

For the past year and a half and more the Gulf Coast has been in the midst of what has gone on record as the most widespread and general wildcatting and exploratory play ever witnessed by the industry. Geophysics, although possibly not being given the attention or recognition due it, has been one of the most important phases of that play, for in this district, where surface indications as a rule are not present or else mean but little, the development of future oil reserves is associated directly or indirectly with the work of the instruments.

Intensive Exploration

The importance of geophysics in the present coastal exploration program is indicated in the amount of money being spent in the use of the instruments. Conservative figures and estimates have been compiled which show that in the Gulf Coast proper alone at least $350,000 is being put out each month to carry on this geophysical exploration, not including any instrument investment or cost of acreage. The expense is the actual cost of the crews and work. The amount naturally varies with the number of crews actually at work and with the locations of the crews and conditions under which they work, and has been estimated as high as $500,000 a month.

There now are between 75 and 100 crews working actively on the coast, the number varying week by week with the movement of the crews from place to place and job to job. Reflection machine and torsion balance crews head the list, these being about equally divided in number. There also are several gravitometer and magnetometer crews out and one pendulum crew.

From a glance at a map or list of Gulf Coast salt domes and fields the impression might be given that no more could be found. Exclusive of a large part of the lower coastal country and taking in only that area generally considered as the Gulf Coast, but including what is known as the "Conroe trend," there are 115 definitely proven fields and known salt domes. In addition, there are some 50 odd other fairly well established prospects undrilled as yet or where drilling has been limited and has not revealed so far any showings or actual salt or cap rock. There are numerous other areas with "geophysical pictures" of a more or less doubtful nature.

May Only Be Scratched

Yet, despite all this showing, it is beginning to be sensed that the past may prove but a scratch to what may be expected in the future in the way of potential sources of oil and gas production. Although the Gulf Coast has been gone over and over in a succession of geophysical plays, additional areas constantly are being worked out, new light is being thrown continually on older prospects and fields, and answers are being found from time to time for different anomalies which have puzzled the geophysicists, thus opening the way for further exploration not only in those particular areas but also throughout the coast wherever the new explanations might serve as a guide for new lines of endeavor. In general, the evolution of the science, the advancement in types and efficiency of instruments, and most important of all the accumulation of knowledge in interpretation of findings, facts and conditions as learned from one discovery to another make the work one of never-ending possibilities.

In the past, geophysics at times has come into discredit by certain sources because of the failure of development to prove up all the prospective areas as indicated by the instruments. During the wave of activity in geophysical exploration which swept over the coastal territory in late 1927, 1928 and 1929, incentive for which was given by the opening of Sugarland early in 1928, a great number of salt dome prospects were reported found. The achievement of Sugarland,

Louisiana Gulf Coast Fields and Proven Salt Domes Discovered by Geophysics

Field and parish—	Year of discovery	Method†	Results	Year product'n found	Year salt or cap found	Remarks
Bayou Blue, Iberville	1926	S	Oil, salt	1929	1928	Production abandoned
Bayou Des Glaise, Iberville	1926	S	Slight shows, salt	....	1929	Not producing
Bay St. Elaine, Terrebonne	1927	S	Gas, salt	1929	1929	Gas production
Black Bayou, Cameron	1927	S	Oil, salt	1929	1928	Producing
Caillou Island, Terrebonne	1928	S	Oil, salt	1930	1929	Producing
Calcasieu Lake, Cameron	1927	S	Salt	....	1928	No production
Cameron Meadows, Cameron	1929	S-TB	Oil and gas, salt	1930	1932	Producing
Chacahoula, LaFourche	1926	S	Oil showings, salt	....	1927	No commercial production
Choctaw, Iberville	1926	S	Oil, salt	1931	1930	Producing
Darrow, Ascension	1927	TB-S	Oil, salt	1933	1933	Producing
Dog Lake, Terrebonne	1927	S	Oil, salt	1929	1929	Not now producing
East Bay Junop, Terrebonne	1927	S	Showings, salt	....	1930	No commercial production
East Hackberry, Cameron	1926	S	Oil and gas, salt	1927	1928	Producing
Fausse Point, Iberia	1926	S	Oil, salt	1927	1927	Not now producing
Four Isle, Terrebonne	1927	S	Salt	....	1929	No production
Garden Island Bay, Plaquemines	1928	S	Gas blowouts, salt	....	1929	No commercial production
Gueydan, Vermillion	1929	S	Oil, salt	1932	1931	Producing
Iowa, Calcasieu-Jeff Davis	1929	S	Oil and gas	1931	....	Producing
Lake Barre, Terrebonne	1928	S	Oil, salt	1929	1929	Producing
Lake Pelto, Terrebonne	1928	S	Oil, salt	1929	1930	Producing
Lake Washington, Plaquemines	1928	S	Oil, sulphur, salt	1931	1931	Producing
Leesville, LaFourche	1928	S	Oil, salt	1931	1932	Producing
Napoleonville, Assumption	1926	S	Salt	....	1926	No production
Port Barre, St. Landry	1926	S	Oil, salt	1929	1929	Producing
Roanoke, Jeff Davis	1928	TB	Showings	1928	....	No commercial production
Sorrento, Ascension	1926	S	Oil, salt	1928	1927	Producing
Starks, Calcasieu	1926	S	Oil, salt	1929	1926	Producing
Venice, Plaquemines	1928	S	Gas blowouts, cap	....	1931	No commercial production
Vermillion Bay, Vermillion	1927	S	Salt	....	1928	No production
White Castle, Iberville	1926	S	Oil, salt	1929	1927	Producing

†S, seismograph; TB, torsion balance.

LOUISIANA GULF COAST

which has turned out to be one of the most important fields on the Gulf Coast, of proving production by a good well on the first test drilled on the strength of geophysical findings led to the assumption that the instruments were almost infallible and that all the other areas found would prove equally as sure as Sugarland. While many of the prospects did prove out as fields or domes, a great many more revealed nothing by drilling and in lots of cases were abandoned after the first test. These failures created considerable doubt in the minds of many operators in regard to the advantages of geophysics. With the unfavorable conditions arising in the oil industry and lack of incentive for new exploration interest in geophysics died down almost completely and very little work was done until after the opening of Conroe in December, 1931, when the present play got under way.

Puzzling Results

Since then there also have been some very conspicuous apparent failures in geophysics, particularly around the Tomball-Huffsmith area where a number of different "highs" were indicated by the instruments. These findings resulted in the drilling of a series of deep dry holes, most of which instead of being high were the opposite, and consquently have been very puzzling to some geophysicists.

However, in view of what has been learned it has been determined that most of the failures have not been due to instruments but rather to the inability of the operators to interpret properly the findings. With additional knowledge constantly being accumulated by the geophysicists, it is probable that eventually explanations will be given for all these old disappointing areas which will enable the working out of new pictures to the end that ultimately all these prospects, and more constantly being found, will be proved up.

Each new discovery seems to bring out some peculiarity all its own which always is directing exploration along newer and newer channels. At the same time many of these findings of instruments may mean very little in the light of present day interpretation but which the future may clear up as new types of plays. In the past many good areas have been passed over simply because the findings were meager or seemed to have little significance. Before the advent of the deeply seated, nonpiercement dome type of field, such as Thompson, Buckeye, Manvel, Pledger and others, geophysical findings and pictures meant but little in the light of knowledge of interpretation at that time only of pictures of shallower, piercement types of domes.

Lacking in Interpretation

This may explain why drilling of many of those older prospects, which were brought to light during 1928 and 1929, failed to uncover anything of particular interest. The first tests, put down on the strength of slight geophysical findings or on pictures showing some irregularity but which was lacking in interpretation, were expected to prove up types of domes and fields known at that time. When they did not do so the areas were condemned without further drilling development at that time to determine other possibilities. Any opening of the more deeply seated and new types of fields would have been quite accidental then. Later development inspired by the wildcatting urge for new things, has led to the discovery of the new type of field and play and with this discovery the mystery of many of these old prospects and pictures has been cleared up and these either have been or can be redrilled in a new light.

It is quite possible that many of the so far unproven prospects represent types of pictures as yet unexplained by any discovery. What the future holds in store in the way of interpretation remains to be seen. It now seems the logical procedure that when any anomaly or irregularity is indicated, no matter how vague it may seem at the time, the area should be leased. If it is not desirable that the operating company carry on an exhaustive development program on the strength of meager, unexplainable and uncertain findings, the acreage should be held. At some time the solution of the picture probably will be found by other drilling which will make the prospect of great value.

Increased Efficiency

Another factor which stimulates the continued active geophysical exploration is the increasing proficiency of the operators in the use of the instruments and in the knowledge of physical conditions which affect the operation and reading of the machines. It is likely that certain physical influences and conditions have resulted and are resulting in errors of findings but as time goes on the increasing knowledge of the operators will be able to make allowances and correct more and more of these errors in future exploration. The possibilities of corrections and of more detailed information are the incentive for never-ending exploration work.

Nearly every type of geophysical machine is finding some place in the coastal exploration program. For general reconnaissance, refraction work has been more rapid although the expense has had to be considered. At this time very little of this work is going on. The torsion balance is popular. It is slower, but with proper operation and interpretation more detailed information may be determined. The reflection method of working out and detailing a prospect is in particular vogue now, but there are factors in this type that leave much to be desired in certain areas. Reflection shooting, one of the newer types of exploration, came into particular promise in the outlining and detailing of the Conroe Field following the completion of the first several wells. It might be stated, however, that the development of the Conroe Field has proved out fairly accurately the findings of the torsion balance, which instrument was used in the area by George M. Bevier of Houston some time before production was found or any drilling done. The torsion balance "high" was checked in the Ransom House and Wilson Strickland Surveys and these surveys since have been found the high part or apex of the structure. The discovery well, drilled by George W. Strake, however, was not put down on the strength of this geophysical information but rather on that operator's own interpretation of surface and geological indications. In view of the earlier, accurate geophysical findings, the field, on the other hand, can be classed as a geophysical discovery.

Value of Geophysics

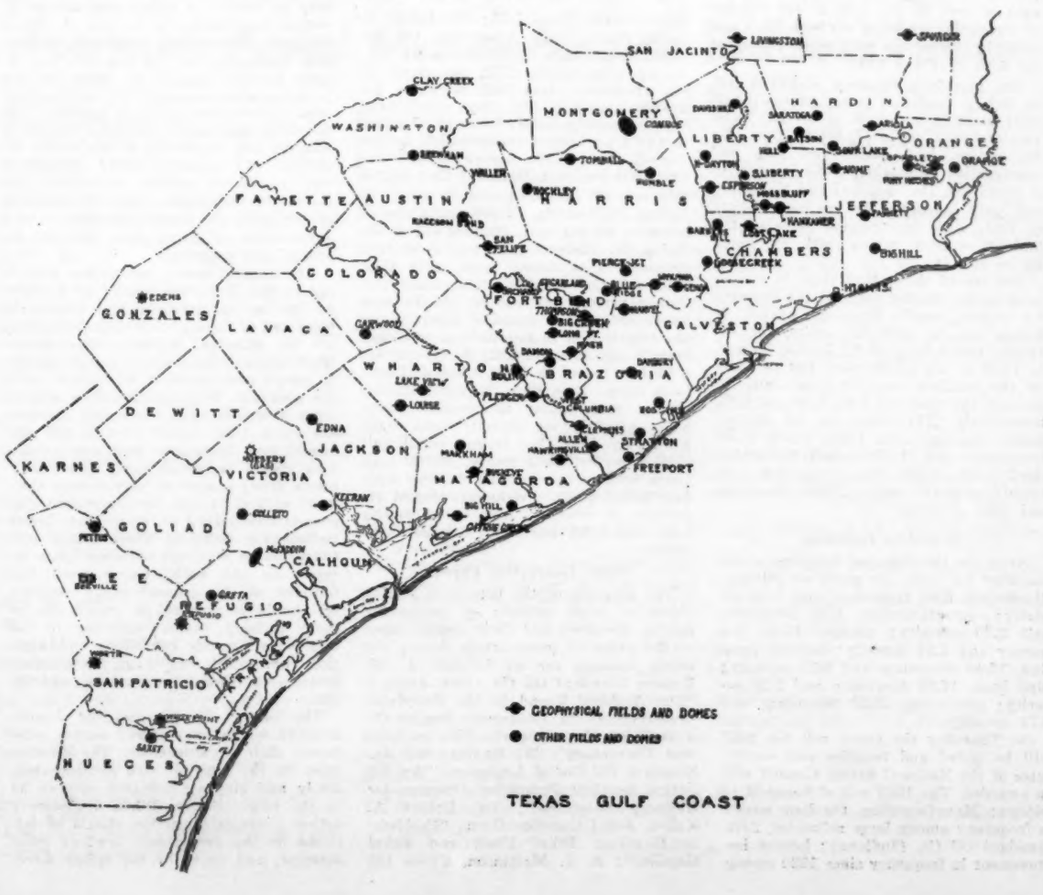
That geophysics has filled a very important and vital place in the develop-

(Continued on Page 34)

Texas Gulf Coast Fields and Proven Salt Domes Discovered by Geophysics

Field and county—	Year of discovery	Method†	Results	Year product'n found	Year salt or cap found	Remarks
Allen, Brazoria	1926	TB	Oil, salt	1927	1925	Producing
Ariola, Hardin	1928	S	Oil, salt	1932	1932	Producing
Buckeye, Matagorda	1931	Mag	Oil	1932	....	Producing
Citrus Grove, Matagorda	1930	TB-S	Gas blowouts	....	....	No commercial production
Clemens, Brazoria	1926	TB	Oil showings, salt	....	1926	No production
Conroe*, Montgomery	1926	TB	Oil and gas	1931	....	Producing
Danbury, Brazoria	1929	S	Oil, salt	1929	1930	No commercial production
East Stratton Ridge, Brazoria	1930	S	Oil, salt	1933	1933	Produced only short time
Esperson, Liberty	1928	TB	Oil, salt	1929	1933	Producing
Fannett, Jefferson	1926	S	Oil, salt	1927	1926	Producing
Garwood, Colorado	1931	Mag.	Oil and gas	1932	....	Producing
Genoa, Harris	1928	TB	Gas	1929	....	No commercial production
Hankamer, Liberty	1928	TB-S	Oil and gas	1929	....	Producing
Hawkinsville, Matagorda	1926	S	Salt	....	1926	Not productive
Keeran, Victoria	1930	TB	Oil and gas	1932	....	Producing
Lake View, Wharton	1928	TB	Gas shows	1932	....	No commercial production
Livingston, Polk	1930	TB	Oil and gas	1932	....	Producing
Long Point, Fort Bend	1924	TB	Oil, sulphur, salt	1928	....	Sulphur prod., oil noncom'l.
Lost Lake, Chambers	1927	TB-S	Oil and gas, salt	1929	1928	Producing
Louise, Wharton	1928	TB-S	Oil shows	1933	....	No commercial production
Manvel, Brazoria	1929	TB-S	Oil and gas	1931	....	Producing
Moss Bluff, Liberty	1926	S	Oil, salt	1930	1926	Not now producing
Mykawa, Harris	1928	TB	Oil and gas	1929	....	Producing
Nash, Brazoria-Fort Bend	1924	TB	Oil, salt	1926	1924	Producing
Nome (China), Jefferson	1930	TB-S	Oil	1933	....	First well now testing
Orchard, Fort Bend	1924	S	Oil, salt	1926	1924	Producing
Pledger, Brazoria	1929	TB-S	Wet gas	1932	....	Producing
Port Neches, Orange	1928	S	Oil	1929	....	Producing
San Felipe, Austin-Waller	1927	TB-S	Gas blowouts, salt	....	1928	No commercial production
Spurger, Tyler	1931	TB	Wet gas	1932	....	Gas production
Sugarland, Fort Bend	1927	TB-S	Oil, salt	1928	1928	Producing
Thompson, Fort Bend	1930	TB	Oil and gas	1931	....	Producing
Tomball, Harris	1925	TB-S	Oil and gas	1933	....	Producing

*Discovery well not drilled on geophysics but area previous worked with torsion balance and present field has checked closely instrument findings. †TB, torsion balance; S, seismograph; Mag., magnetometer.



Oil Safety Engineers Reduce Accidents Below Those of Four Other Important Industries

By ROBERT C. CONINE
Chicago Bureau, The Oil and Gas Journal

CHICAGO, Oct. 2.—The petroleum industry can be proud of the record it is making in promoting the safety of its workers, it was shown today in the report of C. L. Hightower, Texas Pacific Coal & Oil Co., who is general chairman of the petroleum section of the National Safety Council which is holding its twenty-second annual safety congress and exposition here, October 2-6. The injury rate data in this review were collected by the safety department of the American Petroleum Institute.

Injury frequency fell 15 per cent in 1932, while severity dropped 8 per cent, in comparison with 1931, marking a continued decline in both rates since 1929. The frequency rate index for 1932 shows a reduction of 65 per cent in the number of accidents as compared with 1926, while the severity rate index for 1932 shows a reduction of only 5 per cent from the 1926 figure. However, severity rates reached a high figure in 1929, being 23 per cent greater than in 1926, so that the 1932 rate represents an actual reduction of 28 per cent in the period of continued decline.

"The entire industry," the report states, "averaged 12.28 for frequency and 1.91 for severity in 1932. These rates are based on reports from 101 companies whose employes worked almost 566,000,000 man hours during the year. While the exposure is slightly less than for 1931, the number of reporters is the largest since reports have been collected. The interest of the industry in accident prevention work is reflected, also, by a gain of over 40 per cent in the number of companies reporting for both 1932 and 1931, in comparison with those reporting for both 1931 and 1930."

The petroleum industry ranked fourth in injury frequency rate among industries in 1932, and fifth in severity rate. In frequency it rated better than the automotive, food, paper and pulp and construction industries; while in severity it nosed out the chemical and the paper and pulp industries by an index figure of 0.01, with construction showing the highest severity rating with an index figure of 4.44.

The record shows that there is greater need in the smaller units of the industry for safety work. Frequency rates, it points out, in pipe line units, for example, range from 16.82 in the largest, to 18.47 in the middle-sized and to 23.54 in the smallest organizations; and in severity the rates are 1.91, 2.98 and 6.06, respectively. The rates for all departments combined are: Large units, 11.63 frequency and 1.86 severity; middle-sized units, 15.92 frequency and 2.38 severity; small units, 17.30 frequency and 2.59 severity.

Record by Divisions

Rates for the different branches of the industry for 1932 are given as follows: Marketing, 8.80 frequency and 0.96 severity; manufacturing, 9.01 frequency and 2.30 severity; marine, 14.96 frequency and 2.56 severity; natural gasoline, 15.40 frequency and 3.32 severity; pipe lines, 17.32 frequency and 2.23 severity; producing, 25.33 frequency and 3.73 severity.

On Thursday the honor roll for 1933 will be called and trophies and certificates of the National Safety Council will be awarded. The 1932 roll of honor is as follows: Manufacturing, the best record in frequency among large refineries, 2.03, Standard Oil Co. (Indiana); largest improvement in frequency since 1930 among large units, 87 per cent; also in severity, 86 per cent, Standard Oil Co. of Ohio; lowest 1932 severity rate among large refineries, 0.17, Tide Water Oil Co. Marine, lowest 1932 frequency rate among

C. H. HIGHTOWER
Of the Texas Pacific Coal & Oil Co., General Chairman of the Petroleum Section.

large tanker fleets, 7.45; also lowest severity rate, 0.17, Associated Oil Co. Marketing, lowest 1932 frequency rate among large units, 2.62, Standard Oil Co. (Indiana); best 1932 record in frequency among middle sized units, 0.63; also in severity, 0.004, Texas Pacific Coal & Oil Co.; largest improvement in frequency since 1930 among middle-sized units, 66 per cent, Ohio Oil Co.; largest improvement in frequency since 1930 among small units, 70 per cent; also in severity, 63 per cent, Humble Oil & Refining Co. Natural gasoline, lowest 1932 frequency rate among large units, 6.42, Ohio Oil Co.; largest middle-sized unit with a perfect 1932 record, 252,000 man hours without a disabling injury; also the largest unit in the division to reduce both injury rates in 1931 and to attain a perfect record in 1932, General Petroleum Corp. Pipe lines, lowest 1932 frequency rate among middle-sized units, 2.35; also, lowest severity rate, 0.05, Ajax Pipe Line Co.; largest small unit with a perfect 1932 record, 46,000 man hours without a disabling injury, Kendall Refining Co. Producing, largest reduction in severity from 1930 among large units, 93 per cent, Empire Companies.

Many Instructive Papers

The program of the petroleum section shows a large number of interesting papers. Speakers and their contributions in the order of presentation during the safety sessions are as follows: J. W. Meyers, Standard Oil Co. (New Jersey), "The Accident Trend in the Petroleum Industry"; G. O. Lockwood, Empire Oil & Refining Co., "Opportunities in Accident Prevention"; W. P. Reymond, Jr., Standard Oil Co. of Louisiana, "An Effective Accident Prevention Program for Refinery Operation"; Dr. Robert A. Kehoe, Ethyl Gasoline Corp., "Problems in Handling Ethyl Fluid and Ethyl Gasoline"; A. J. Martinson, Union Oil Co. of California, "Controlling Accidents Among Marketing Department Employes"; Capt. A. A. Nicholson, Texas Co., "Safety for the Public in Sales Operation"; J. L. Manes, Sun Oil Co., "Moving In and Drilling the Well"; L. F. Knox, General Petroleum Corp., "Bringing in the Well and Disposal of Oil and Gas"; H. L. Hershey, East Ohio Gas Co., "Operation and Maintenance of Pipe Lines."

Safety in Refinery Operation

In his paper outlining an effective accident prevention program for refinery operation, Mr. Reymond quotes a major company executive thus, "Because accident prevention work is essentially humanitarian, it is not to be inferred that a special claim to virtue is made for the company on that score. The work has another aspect strictly in accord with the practical aims of industrial activities: Betterment of working conditions, wrought through a lessening of hazards of physical injury to workers, invariably raises the morale of the personnel and increases efficiency results. Thus, regarded from either viewpoint, it is good business."

Accident prevention, says Mr. Reymond, must begin at the top. The management must stand behind safety so firmly and actively that every foreman and workman will feel the management's support, and it must be known that no employes who fail to co-operate in the movement will be retained. In every refinery one man should be made responsible for the safety of personnel, and may be known as safety engineer or director. He should be a man of vision, initiative, persistency, judgment, diplomacy, leadership, and sympathy. And he must be well trained. He must be able to delegate his responsibility to the foremen, supervisors and gang pushers. The following program of activities should be effected and supervised by the safety director: (1) General safety committee, (2) workmen's safety committee, (3) foremen's inspections, (4) investigation of accidents, (5) formation, adoption and enforcement of safety rules, and (6) an educational program.

The general safety committee, according to Mr. Reymond, should be appointed by the management and should be composed of foremen representatives from all the principal refinery departments, their terms being limited to six months to assure association of all foremen with the program. Meetings should be held at least bi-weekly with the safety director, at which time injury reports are discussed and inspection data read. Opinions should be stated freely. The workmen's safety committee may operate similarly with the terms for department representatives limited to two or three-month periods for rotation. Their active participation at meetings increases their interest in the work. Every week two foremen of the general safety committee should be assigned to inspect one or more refinery zones, reporting to the director all unsafe conditions and practices, unsanitary conditions, poor housekeeping, the need for safeguards, and the like.

The safety director and the department in which an accident occurs must report their investigations. The director must fix the cause of each accident definitely and give an unbiased opinion as to the responsibility. When disciplinary action is indicated, action should be initiated by the department head or management, and never by the safety director, who must secure and retain the good will of all employes. Safety rules, according to Mr. Reymond, should include (1) instructions outlining the safe and efficient methods to be followed by the various crafts in performing their everyday duties; (2) instructions outlining the safe procedure for conducting refining operations; (3) instructions outlining the procedure for adequately preparing refining equipment for inspection, maintenance, and repair work; (4) a system of written permits for issuance by authorized process foremen allowing hot work or work on and near equipment that has been in service; (5) instructions regulating the personal conduct of employes and the use of necessary safeguards.

Handling Tetraethyl Lead

Ten years of experience and of critical investigation have failed to reveal the existence of danger to any group of workmen or to the general public, because of the presence of small amounts of tetraethyl lead in automobile fuel, Dr. Robert A. Kehoe, Ethyl Gasoline Corp., says in his paper on the proper handling of tetraethyl lead fluid. While Doctor Kehoe discusses the dangers of lead poisoning, he points out that Ethylized motor fuel is by no means accountable for greater part of the assimilable lead to which humans are daily exposed, so that it is important to keep a close check on all factors which affect lead intake.

Safety in Pipe Line Operation

H. L. Hershey, East Ohio Gas Co., discusses the operation and maintenance of pipe lines from the standpoint of safety. He makes four divisions: (1) Field or gathering lines; (2) compressor stations; (3) trunk pipe or transmission lines, and (4) distribution lines (medium-high pressure and low pressure).

Under the first he points out the necessity for removing water from the lines so that freezing may not obstruct the pipe. Gasoline, oil or salt water in the line might cause deterioration of fittings on the line. Other items considered under this head are safe heating in measuring stations, installation of check valves and line gates, and the inspection and repair duties of well tenders and the field division. Under the heading of compressor stations a constant checkup on all safety devices and other equipment is urged. Patrolling is the essential safety feature in connection with maintenance of transmission lines, and reports are to contain unusual conditions such as washouts, landslides, road improvement, erection of buildings on or near the line, complaints of property owners. In the matter of distributing systems the greatest danger is in replacement and reconstruction work when much of the work is done at night and when effective lighted barricades must be put up.

Handling Acids and Caustics

While not presented in the petroleum section, the paper on "Safe Use of Chemicals in Industry," by C. E. Ralston, Pittsburgh Plate Glass Co., is worth noting. Mr. Ralston says, "Proper clothing and body protection are extremely important. Clothing should be changed daily. Rubber gloves and aprons should be worn, and in many cases rubber boots or wooden clogs. Close-fitting acid proof goggles are necessary in most cases. Efficient respirators should be provided where fumes are concerned. Some work requires the wearing of a hood covering the head and shoulders."

Case of Industry Will Be Diagnosed at Chicago; Oil Administrator Ickes to Address A. P. I.

NEW YORK, Oct. 2.—The petroleum industry in the United States, as it exists under influences set to work through the National Industrial Recovery Act, will be subject of a thorough diagnosis when the American Petroleum Institute meets in fourteenth annual assembly in Chicago at the Stevens Hotel, October 24, 25, and 26. A large number of committees of the Institute will be in session on the days immediately preceding. One of the principal sessions will be held on Wednesday morning, October 25, when Harold L. Ickes, Secretary of the Interior and Federal oil administrator, and Wirt Franklin, chairman of the Planning and Co-ordinating Committee for the industry, will review the busy weeks in the late summer and early fall that brought the machinery of the Code of Fair Competition for the petroleum industry to functioning.

President's Address

Axtell J. Byles, president of the American Petroleum Institute, will deliver his address at a general session on Tuesday afternoon at 2:30, and at the same time the work of the American Petroleum Industries Committee, with H. T. Klein as chairman and Baird H. Markham as director, will be presented. The committee has extended its activities into every section of the United States in combating bootlegging, tax evasion, and other forces inimical to the industry and to the public since it was formed at the annual meeting in Houston last November. At the opening general session also awards of certificates will be made to companies that have excelled in accident prevention, and 32 members of the board of directors will be elected after nominations are made by the board of councillors.

Group Sessions

Eleven group sessions of the Divisions of Production, Refining, and Marketing are scheduled for the three days' meeting, and nearly 100 of the Institute's working committees will hold meetings. The Division of Production will hold five sessions; the marketing division three sessions, and the refining, two sessions, in addition to a joint session of the Divisions of Refining and Marketing which will be devoted to automobile operation; the topic to be divided into two parts: How can the petroleum industry help the automotive industry, and how can the automotive industry help the petroleum industry, followed by general discussion.

Nominations for Directors

Suggested nominees for membership on the board of directors of the American Petroleum Institute are being received by William R. Boyd, Jr., executive vice president, from councillors in preparation for the fourteenth annual meeting when 38 of the 77 board members will be chosen. More than 400 members of the board of councillors, divided into groups representing the various phases of the industry, including production, manufacturing, transportation, distribution foreign trade, supply, natural gas and natural gasoline, designated by the Institute board of directors have been advised of their election by Mr. Boyd, and their suggestions for membership on the board invited. Membership on the Institute board of directors includes 14 representatives for production, 10 for manufacturing, 7 for distribution, 3 for transportation, 3 for foreign trade, 1 each for supply, natural gas, and natural gasoline; and a group-at-large of 37 members; 16 of whom are named by the board of directors and the remaining 21 by the membership. The directors are allocated by regions as well as according to branches of the industry. Terms of directors are for two years, and this year the membership will elect 12 directors and the board of directors will appoint 6.

The board of councillors will meet at Chicago at the Stevens Hotel at 10 o'clock on the morning of October 24 to make their nominations. Subgroups of the councillors will make recommendations according to geographical regions and divisional functions, and the general group will nominate 12 directors for the group-at-large.

The list of councillors sent out by Mr. Boyd lists the following expirations of the terms of directors according to groups and regions:

Pacific Coast, Production, George Legh-Jones, Shell Oil Co., San Francisco, and W. C. McDuffie, Pacific Western Oil Co., Los Angeles.

Rocky Mountain, Production, B. B. Brooks, Consolidated Royalty Co., Casper, Wyo.

Central United States, Production, H. V. Foster, Foster Petroleum Corp., Bartlesville; J. Edgar Pew, Sun Oil Co., Philadelphia; Frank Phillips, Phillips Petroleum Co.; Charles F. Roeser, Roeser & Pendleton, Inc., Fort Worth.

Eastern United States, Production, O. D. Donnell, Ohio Oil Co., Findlay, Ohio.

Pacific Coast, Manufacturing, R. D. Matthews, Union Oil Co., Los Angeles.

Rocky Mountain, Manufacturing, T. A. Dines, Salt Creek Producers Association, Denver.

Central United States, Manufacturing, P. M. Miskell, Empire Refineries, Inc., Tulsa.

Eastern United States, Manufacturing, Charles L. Suhr, Pennzoil Co., Oil City, Pa.

Rocky Mountain, Distribution, W. H. Ferguson, Continental Oil Co., Denver.

Central United States, Distribution, E. G. Seubert, Standard Oil Co. (Indiana).

Eastern United States, Distribution, W. T. Holliday, Standard Oil Co. of Ohio, Cleveland.

Tank cars, Lauren J. Drake, Union Tank Car Co., Chicago.

Natural gas, Floyd C. Brown, Continental Construction Co., Chicago.

Natural gasoline, Edgar J. Marston, Texas Pacific Coal & Oil Co., Fort Worth.

Foreign trade, H. L. Pratt, Standard Oil Co. (New York), New York; R. Airey, Asiatic Petroleum Co., New York.

At large: J. D. Collett, O'Keefe & Collett, Fort Worth; H. T. Klein, Texas Co., New York; F. R. Coates, Henry L. Doherty & Co., New York; W. N. Davis, Phillips Petroleum Co., Bartlesville, Okla.; R. C. Holmes, New York; F. A. Leovy, Gulf Production Co., Pittsburgh; J. F. Lucey, Lucey Petroleum Co., Dallas, Tex.; E. W. Marland, Ponca City, Okla.; Wallace E. Pratt, Humble Oil & Refining Co., Houston, Tex.; H. F. Sinclair, Consolidated Oil Corp., New York; J. W. Van Dyke, Atlantic Refining Co., Philadelphia; E. B. Reeser, Barnsdall Oil Corp., Tulsa.

Preliminary Program, Fourteenth Annual Meeting American Petroleum Institute

Tuesday, October 24, 1933

Morning—10:30 o'Clock

Meeting of Board of Councillors—North Ballroom.

To nominate candidates for election as members of the Board of Directors.

Afternoon—2:30 o'Clock

General Session—Grand Ballroom.

The President's Address—Axtell J. Byles, American Petroleum Institute.
Report of Board of Councillors and Election of Directors.
Presentation of Accident Prevention Certificate Awards.
Program of the American Petroleum Industries Committee.

Evening—8 o'Clock

GROUP SESSION

Division of Production

Metallurgy and Corrosion of Oil Field Equipment—South Ballroom.

(Sponsored by the Topical Committee on Metallurgy and Corrosion of Oil Field Equipment.)
Presiding: Blaine B. Wescott, Gulf Research & Development Corp.
Corrosion—Fatigue and Protective Coatings, F. N. Speller and I. B. McCorkle, National Tube Co.
Corrosion Fatigue and Sucker Rod Failures, Blaine B. Wescott and C. N. Bowers, Gulf Research & Development Corp.

GROUP SESSION

Division of Production (Continued)

Combating Corrosion of Production Equipment, Stanley Gill, Consulting Engineer.
Special Alloys for Working Barrels and Balls and Seats, W. F. Rogers, Gulf Production Co.

Wednesday, October 25, 1933

10 A.M.

GENERAL SESSION

General Session—Grand Ballroom.

Address: Harold L. Ickes, Secretary of the Interior, and the Oil Administrator.
Address: Wirt Franklin, Chairman, Planning and Co-ordinating Committee.

2 P.M.

GROUP SESSIONS

DIVISION OF PRODUCTION

Essential Engineering Factors in the Allocation of Production—South Ballroom.
Presiding: Fred E. Wood, Standard Oil Co. (Indiana).
Symposium sponsored by the Topical Committee on Allocation of Production, Fred E. Wood, Chairman. Speakers and subjects to be announced.

2 P.M.

Solvent Refining—North Ballroom.

Presiding: L. W. Parsons, Tide Water Oil Co.
Solvent Extraction and Its Application, J. W. Poole, J. M. Wadsworth, Foster Wheeler Corp.
Refining of Lubricating Oils by Solvent Extraction with Furfural, R. E. Manley, B. Y. McCarty, and H. H. Cross, Texas Co.
Scope and Flexibility of the Edeleanu Processes, O. P. Cottrell, Edeleanu Co.
The Netro-Benzene Process—Construction and Operating Costs, S. B. Ferris, W. A. Myers, and A. J. Peterkin, Atlantic Refining Co.
Chlorex Process for Producing High-Grade Lubricating Oil, W. H. Bahlke, A. B. Brown, and F. F. Diwoky, Standard Oil Co. (Indiana).
Relation of Duo-Sol Process to Other Processing Steps Necessary for Lubricating-Oil Manufacture, Malcolm Tuttle and Max B. Miller, Max B. Miller Co.
The Use of Phenol as a Selective Solvent in the Production of High-Grade Motor Oil, R. K. Stratford, O. S. Pokorny, and J. K. Hugett, Standard Oil Development Co.

2 P.M.

DIVISION OF MARKETING

Automotive Transportation—Grand Ballroom.

(The Chicago Section of the Society of Automotive Engineers is co-operating with the Institute's Central Committee on Automotive Transportation in holding this group session.)
The Use of Personally-Owned Cars in Company Service, L. V. Newton, Byllesby Engineering Co.
Operating the Modern Vehicle with Air Brakes and Air Control, S. Johnson, Jr., Bendix-Westinghouse Automatic Air Brake Co.
Effecting Economies in Marketing Division Transportation, Charles Foster, Deep Rock Oil Corp.

8 P.M.

DIVISION OF PRODUCTION

Drilling Practice—South Ballroom.

(Sponsored by the Central Committee on Drilling and Production Practice.)
Presiding: W. K. Whiteford, Barnsdall Oil Co.
Cementing in the Gulf Coast.
Blowout Prevention.
Improvements in Dismantling and Setting Up Rotary Rigs.
(Papers sponsored by the Southwestern District Drilling Practice Committee. Speakers to be announced.)

(Continued on Page 33)

Solubility of Hydrogen and Natural Gas in Oils at High Operating Temperature and Pressure

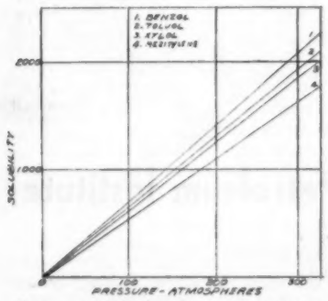
By V. IPATIEFF, Jr., V. P. TEODOROVITCH and I. M. LEVINE
State Institute of Leningrad

The present-day chemistry of high pressures deals with a number of syntheses, where liquid and gas are reacting substances. The reaction between liquid and gas will have a high rate of reaction only when the liquid is well saturated with gas. The maximum rate is reached when the concentration of gas dissolved in the liquid will correspond to a saturation point of the gas in the liquid. The saturation of liquid by gas is obtained in most cases by thorough mixing or shaking this liquid with gas. This can be accomplished either by the use of a special stirrer inside of the autoclave, or by rotating the autoclave itself. The permiability of gases into the liquid by the diffusion alone is not sufficient.

The following work done lately on the solubility of gases in liquids under pressure is mentioned below[1].

As far as the work on diffusion under pressure is concerned, there is only one work reported in literature on diffusion of hydrogen in water by V. Ipatieff, Jr., and V. I. Tichomiroff. J. Chem. Soc. U.S.S.R. 1, 736 (1931).

In connection with increasing interest to hydrogenation under pressure and to destructive hydrogenation of heavy



Curve 1. Relation between solubility of hydrogen and the pressure

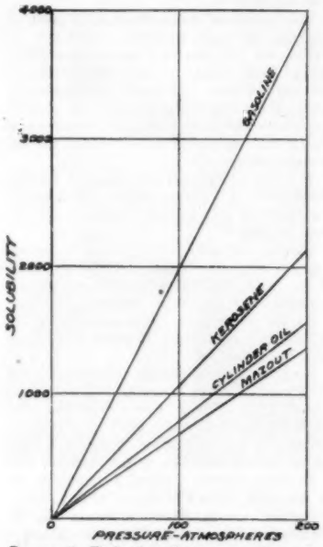
oils and other tar products, it became quite interesting to obtain all necessary coefficients of solubility of hydrogen under pressure and high temperature in light and heavy oil fractions, as well as in some individual hydrocarbons.

Since in hydrogenation, gases with great quantities of methane are formed as a by-product, preliminary determinations of the solubility of natural gas in kerosene and mazout at high temperature and pressure were made.

This investigation is the beginning of a series of new investigations, because the results obtained on technical mixture can not give data for scientific theories or generalities. The work carried out at present with individual hydrocarbons will give the possibility to come closer and more accurately to the essence of the phenomena, observed during the equilibrium between gas and liquid.

Method of Operation

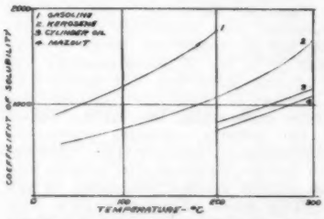
In order to determine the coefficient of solubility, the liquid under investigation was placed in the high pressure bomb. The necessary pressure was applied through the upper valve, the liquid was thoroughly mixed with the gas, afterwards a sample was taken into a gas burette through a special valve. The liquid, introduced into the burette, gave off all the gas dissolved in it. By direct reading of the volume of liquid and gas



Curve 2. Relation between the solubility of hydrogen in petroleum product and the pressure at 200° C.

in the burette and by correcting the volume of gas to normal conditions, the coefficient of solubility was calculated. Coefficient of solubility is expressed in terms of the quantity of gas in c.c. dissolved in 100 c.c. of solvent at partial pressure of 100 atmospheres. The partial pressure of hydrogen was determined by means of special tests for determination of vapor pressure of technical mixtures at high temperatures. The correction for pointing effect was not used. By the term solubility is meant the quantity of gas in c.c. dissolved at a given pressure in 100 c.c. of solvent. The volume of liquid is taken at room temperature, since in most cases the coefficient of expansion is not known.

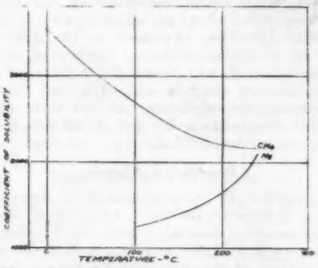
In carrying out the experiment at various temperatures, the autoclave was inserted either into (1) isothermic room, where by means of electric heater, ventilator and thermoregulator, the temperature could be controlled as close at 0.05° C. at the operating temperature ranging from 10° C. to 50° C., or into (2) oil bath, the temperature of which was controlled by a thermostat with accuracy of 0.1° C. when the temperature range was between 100° and 250° C., and



Curve 3. Relation between coefficient of solubility of hydrogen and temperature

finally into (3) air thermostat, heated by electric current when the temperature range is above 200° C. An autoclave placed in any of the above thermostats had a stirrer and a siphon through which a gas sample, previously passed through cooler made of copper coil, was drawn into burette. The cooler was inserted in a water thermostat kept at a temperature of 20° C. The cooler is necessary in order to cool the sample to a definite temperature. Since the solubility of hydrogen in petroleum products at elevated temperature and pressure is high, a system of burettes with an equalizing bulb, illustrated on Figure 1, was used. Figure 1 also shows the complete apparatus used for determining the solubility of gas in liquid under pressure at temperatures ranging from 100° to 250° C.

For the purpose of checking the accuracy of the method, the solubility of



Curve 4. Relation between coefficient of solubility of methane and nitrogen in kerosene and the temperature

hydrogen in some individual liquid hydrocarbons was made.

The results of the above determination are shown in Table 1, which is as follows:

TABLE 1—SOLUBILITY OF HYDROGEN IN BENZOLE TOLUOL, XYLOL AND MESITYLENE

Pressure in atmospheres temp., 25°C.	C.c. of dissolved H_2 in 100 c.c. of liquid	Coefficient of solubility
Hydrogen—Benzole (Sp. Gr. 0.8692)		
31	205.1	661
51	354.8	695
81	524.8	650
101	682.6	682
121	809.2	677
151	1,001.0	662
181	1,237.0	683
315	2,039.0	647
Hydrogen—Toluol (Sp. Gr. 0.8616)		
51	322.8	635
81	518.0	639
255	1,688.0	662
Hydrogen—Xylol (Sp. Gr. 0.8587)		
51	315.8	613
101	624.8	617
144	892.0	620
291	1,810.0	622
Hydrogen—Mesitylene (Sp. Gr. 0.8636)		
51	286.0	521
101	564.0	548
181	1,126.0	622
Hydrogen—Benzole		
Temp., 40°C.		
26	211.7	756
100	752.3	752
200	1,458.0	729
301	2,228.0	773
Hydrogen—Toluol		
51	385.6	756
101	763.0	755
202	1,530.0	757
302	2,370.0	784
Hydrogen—Xylol		
25	199.0	765
50	386.0	772
198	1,430.0	722
319	2,230.0	715
Hydrogen—Mesitylene		
50	312.0	624
101	627.0	630
Hydrogen—Benzole		
Temp., 100°C.		
51	482.0	965
91	767.0	844

Curve No. 1 illustrates the effect of pressures upon the solubility of hydrogen. Analyzing the results obtained, a conclusion can be drawn that, first the solubility of hydrogen is increasing with

(Continued on Page 30)

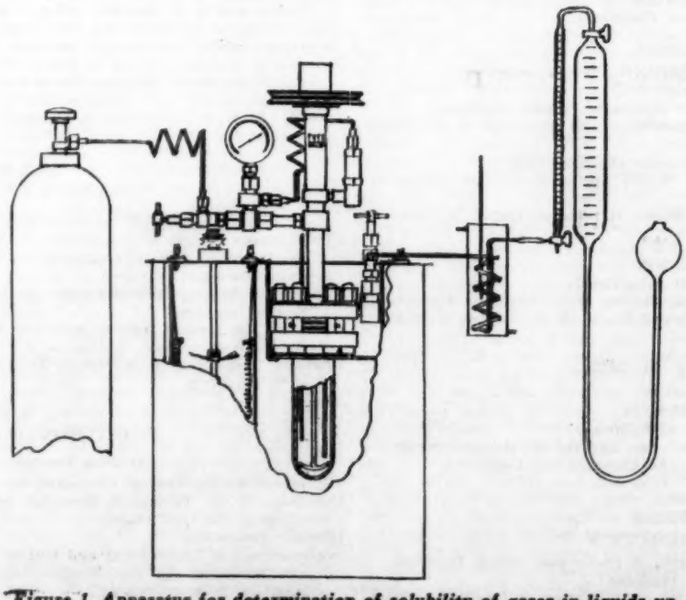


Figure 1. Apparatus for determination of solubility of gases in liquids under pressure at a temperature from 100 to 250°C.

[1] V. Ipatieff, Jr., and V. I. Tichomiroff, Ber. 65, 568 (1932).
V. Ipatieff, Jr., and V. P. Teodorovitch. J. Chem. Soc. U.S.S.R. 2, 305 (1932).
P. K. Frolich and J. J. Hogan. Ind. Eng. Chem. 23, 548 (1931).
J. B. Goodman and N. W. Krase. Ind. Eng. Chem. 23, 401 (1931).
R. Wiebe, V. L. Gaddy and C. Heins, Jr. J. Amer. Soc. 55, 947 (1933).
R. Wiebe and T. H. Tremearne, J. Amer. Soc. 55, 975 (1933).

Once there were two refiners, A and B

Each enjoyed a fair share of the gallonage in their common marketing territory

Until:

Refiner A built a Dubbs cracking unit in his plant

Then:

Refiner B's stations began steadily to lose gallonage B was puzzled, then annoyed, then alarmed

He investigated

He found that Refiner A was getting the business he was losing—because A was selling anti-knock Dubbs cracked gasoline

Refiner B is now building a Dubbs cracking unit to get back his gallonage, but he has lost a lot of business and profit which he might have had

Dubbs cracking is the right answer

Universal Oil Products Co
Chicago, Illinois

Dubbs Cracking Process
Owner and Licensor

Rubber in Many Forms Plays an Important Part in Every Department of Petroleum Industry

By L. G. E. BIGNELL
Petroleum Engineering Editor

It has been estimated that in excess of 750 different industries will come under the National Recovery Act. The subdivisions of the major industries are almost limitless, but it is generally recognized that there are a comparatively few basic industries, and among them petroleum and rubber rank high. These two industries have much in common and both were given their greatest growth through the development of the automobile in the early part of this century. Both products of crude oil and crude rubber have played a most important part in the development of the automotive industry and no real substitute for either has been found to date.

All industries bear certain relationship to other industries and while it might be interesting to try to trace the part played by petroleum in the industrial progress of this nation it will not be attempted in this article. It is the purpose of this story to trace the use of rubber in the petroleum industry starting with the first operations in acquiring the lease to the land and tracing it on through drilling, producing, transporting, refining and finally to marketing.

Until one has made an investigation into this matter it is difficult to realize how important a part rubber and rubber goods play in the development and production of petroleum. Without rubber tires every department of the industry would be greatly handicapped in transporting men and materials. Belting for transmitting power is also one of the first thought of uses for rubber, as well as numerous uses for mechanical moulded rubber goods that come to mind when trying to think of places where rubber is used in the production, refining, and marketing of crude oil and its products.

Purchase of Rubber Goods

One purchasing agent for a major company estimates that 20 per cent of the money he spent went for rubber goods. Such small items as stuffing box rings for polished rod boxes mount up to a ton or more of orders per month. These little items, small in themselves, are multiplied by four for each box and when a company is operating from 3,000 to 5,000 wells, most of them on the pump, the number of rings used assumes large proportions.

Cups for the working barrels is another item covering a small part but an important one and the total number of cups made of a composite material containing some rubber is rather significant when considered as a whole. Common working barrels are still used in most of the older wells where only a small quantity of oil is recovered each day and while the changes in cups are not made frequently, but with 300,000 wells on the pump and a large part of them using from 4 to 10 cups in each working barrel the total number used is a rather large figure.

Numerous other items might be named promiscously but let us take the journey through the petroleum industry in an orderly manner starting with the first operations of acquiring the leases to the land.

The acquisition of leases upon land for the purpose of prospecting for oil and gas may follow or preceed the working of the area by geophysics. Modern methods of development almost invariably include the making of geological reports upon the area under consideration. These geological reports are now based largely upon geophysical work which may be done by any one of three or four methods. Magnetic, gravitational, seismic and electrical methods are the principal ones now employed.

If it is assumed that the lease has been secured before geological report is made it will be found that about the only place where rubber has played a part in the transactions is in the tires of the automobile used by the lease man, and in the rubber heels on his shoes as he tramped from office to office to dispose of his interests. Of course, rubber bands and rubber erasers may play their parts but these are small items and merely indicate that early in the life of an oil property rubber has begun to make its appearance and the volume used increases as the activity of development and production progresses.

One method of working an area has been to drill numerous holes with core drills and secure sections of the formations penetrated down to a particular stratum that is known as a "marker" or "key horizon." The position of this particular stratum in the various cored holes will determine the general shape of the structure and from this the geologist determines where it is favorable for drilling. Portable core drilling outfits are usually used for this kind of work and they are steam driven. A good deal of hose is used around such an outfit as well as much packing for various parts.

In the geophysical work rubber covered wire is used extensively in all electrical and seismic methods. There is also some soft rubber used in containers for apparatus where it is desired to eliminate shock being transmitted to delicate parts either in transit or in handling. These cushions of rubber are inserted at places where they will lessen the shocks and play an important part in the handling of some instruments.

The amount of rubber used by a geophysical prospecting outfit will vary with the type of country explored. Rubber boots, coats and rubber covered tarpaulins are used extensively in wet climates or in areas where much of the work is carried on in boats among bayous and swamps or in inlets from the sea.

Drilling

After the lease has been secured and if the geological report is favorable it is usual practice to drill the first well to hold the lease. The time of drilling such a well will vary with many conditions but assuming that orders have been given to start a well the next thing to do is to make the location. The field superintendent usually does this by driving to the lease and then measuring the distance to the well site from the property lines. Having made the location a stake is driven in the ground and the material for drilling is ordered out.

There are two types of drilling practice, cable tools and rotary. Under either method steam is usually used for power and this requires the use of boilers. Rubber is used in gaskets for manhole and handhole covers. Rubber hose for water is used extensively around either type rig. Also hose for steam, gas and air. Some hose may be used in transferring fuel oil from truck tanks to storage tanks.

In setting up a drilling outfit there is almost certain to be places where welding is needed. In fact the driller looks upon the welder as one of his best assistants and make frequent use of his services for all manner of work both in repairing old equipment and fitting new parts to old outfits. Every welder uses a great deal of very high grade rubber hose for delivering gas to his torch.

There are numerous places around either type rig where rubber gasket is used, in fact, no well-organized drilling crew would think of starting to drill a well without a roll of rubber gasket in the tool house.

Rubber-covered wire is used for lighting systems around the rig. Belting made with rubber is used on either type rig for transmitting power. With cable tools heavy belts are used for the bandwheel drive. On the rotary outfits power is transmitted from steam engine or prime mover to the drawworks by chain drive but in a few instances countershafts are used and belts needed to transmit power to the countershaft.

With the rotary outfit there is a considerable quantity of rubber in accessories used around the rig. The rotary mud is handled from slush pumps to swivel or kelly joint through high pressure rotary hose. This is a specially designed hose that is tested for from 3,000 to 5,000 pounds per square inch pressures although such high pressures are

(Continued on Page 30)

DO YOU REMEMBER?

From The Oil and Gas Journal Files

25 Years Ago

October 4, 1908

Wildcat wells are being drilled in Texas near Matagorda, at Columbia, Sheppard's Mott, Lufkin, Chenango, Palestine, El Campo, Van Vleck, South Houston, Boggy Prairie and Davis Hill, Texas.

W. H. Gray has organized the Martinez Oil Co. to operate in Colombia, South America. Mr. Gray and W. H. Cummings, in charge of operations have gone to Colombia, where the company's first test will soon be started.

Oil men from Pennsylvania, Illinois, Kansas, Oklahoma and Texas have been pouring into the Tampico district in Mexico since the enormous producer in the San Geronimo Field came in, and it is said 50,000,000 acres of land has been leased by these Americans.

20 Years Ago

October 9, 1913

The price of gas to consumers in Bradford and Oil City, Pa., is raised 2 cents, to 32 cents per 1,000 feet.

Frank Drake, age 82, veteran oil man, dies in Foster, Calif. He was a forty-niner in California, but returned East with the opening of the Pennsylvania oil excitement and operated in the Venango, Bradford and Allegany Fields and later in Ohio with the Van Vleck and Stow interests.

Frederick J. Haskin, in an article on gas conservation, estimates the value of gas wasted yearly in Oklahoma at $7,500,000; Louisiana $5,500,000, and California $8,000,000, and in the entire United States, $23,000,000.

The Pierce Oil Corp.'s Sand Springs, Okla., refinery will be completed by December 1. It is already running 5,000 bbls. of oil per day to stills.

Ten Chanute, Kans., property owners living in a block have drilled a gas well in the block which is good for 150,000 feet per day and have solved their winter fuel problem.

A well drilled for water on the Joe Knight farm, south of Dewey, Okla., found a showing of oil at 77 feet. The well was shot and started off at 20 bbls. a day.

10 Years Ago

October 4, 1923

Henry Ford wires The Oil and Gas Journal that he is not going into the oil business.

Lyman Stewart, founder of the Union Oil Co. of California, and chairman of its board of directors, dies in Los Angeles. He was born near Titusville, Pa., in 1840.

Henry H. Cross, of Chicago, is preparing to build a refinery in Smackover, Ark. Tanks are being built and other material is being moved to the site.

Big Creek Pool in Fort Bend County, Texas, is opened by the Gulf Production Co. and Snowden & McSweeney with an 800-bbl. well.

Humble Oil & Refining Co. has 52,000 bbls. per day production from 63 wells in the Powell Field, Texas.

The first International Petroleum Exposition and Congress will open in Tulsa on October 8.

R. E. Collom resigns as state supervisor of oil in California.

William H. Zahnizer, of the producing firm of Gibson & Zahnizer, dies in New York. He was vice president of the Atlantic Gulf Oil Corp., and of the Galvez Oil Corp., and president of the Atlas Steel Barrel Co.

R. H. Bartlett, of Tulsa, is elected president of the Braden Co.

FOR MAXIMUM RECOVERY AND REDUCED LIFTING COSTS

Repressure With TRANSIT Four Cycle Gas Engine Compressors

TRANSIT offers the most modern of gas engine driven compressors for maintaining or building up depleted rock pressures economically by repressuring with gas or air.

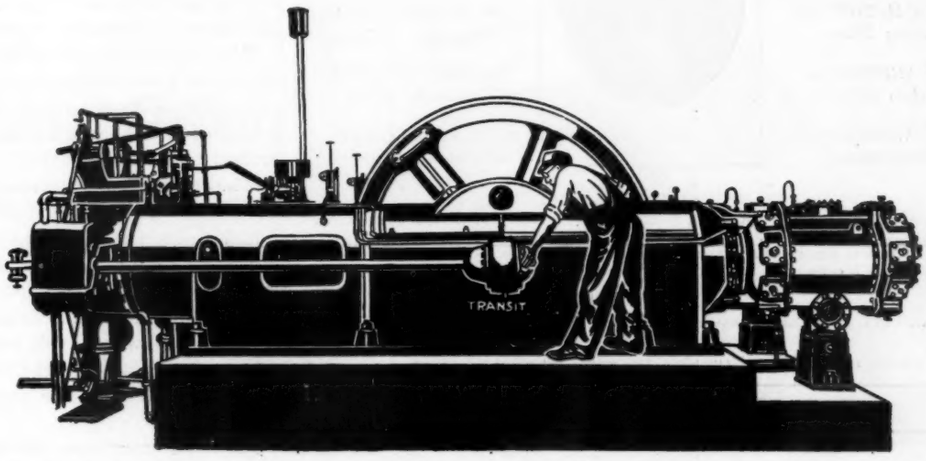


Fig. 1926—17 x 24" Twin, 180 Rpm., 170 H.P., 4-Cycle, Single Acting, Direct Connected, Opposed Type Gas Engine Gas Compressor

Here is an engine designed and built for hard continuous service—an engine which will give you a dependable source of power over a long period of years with low operating costs and entire satisfaction. The four stroke, four cycle design, having a long stroke and relatively slow speed makes it the ideal type for repressuring service.

A few of the outstanding features of the TRANSIT gas engine driven compressors are:

1. Dependability—The name TRANSIT has appeared on gas engines for over forty years.
2. Simplicity, ease of operation and easy starting.
3. Uniform load distribution in all cylinders.
4. Back-firing eliminated due to a special regulating valve and mixer.
5. Lowest possible fuel consumption.
6. Quiet and smooth in operation and capable of withstanding a 25% overload without stalling at standard rated speeds.
7. Low maintenance cost due to efficient lubrication and cooling system, unusually large bearings and special attention to the design of all reciprocating parts.
8. Accessibility—All parts of the engine easily accessible for adjustment.

TRANSIT Gas Engine Compressors can be furnished in sizes ranging from 155 to 1500 horsepower and for any desired pressures.

Literature describing these engines in detail will be furnished upon request.

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OIL CITY, PENNSYLVANIA

NEW YORK . CHICAGO . CLEVELAND . PITTSBURGH . LOS ANGELES . HOUSTON . TULSA

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Member, Audit Bureau of Circulations

Making It Stick

Crude oil prices have now improved to a point where they are approaching cost of recovery. But, instead of saying they have increased 250 per cent the correct statement is that whereas they were 75 per cent below cost they have not yet returned to a balance between outgo and income.

Yet even this is occasion for general rejoicing in an industry which has so long been doing business at a loss. After the past four years any business nearer able to make ends meet is to be congratulated.

If conditions are shaping so that it can at least do so it may well feel that the worst is over.

The oil industry believes it is approaching that stage. If overproduction can be not only checked but prevented, if price cutting, tax evasion, bootlegging and other forms of cheating can be kept out, there will be a chance for a further revision of prices which will provide for a reasonable profit, not obtainable under the present schedule which falls short of cost of recovery.

It must be remembered that certain costs have been greatly increased over what they were even in 1929. Taxes for instance.

Everybody knows how taxes have gone up and oil men and oil companies have suffered these increases like every one else, with some special increases levied on oil alone.

These increases enter into the cost of doing business and if not repaid by better prices result in outgo exceeding income.

There has also been added the increased expense entailed by the program for reducing working hours and enlarging employment, not alone in the petroleum code but in all the other codes of industries and businesses with which the oil industry has dealings.

These additional expenses have to be met by increased prices on whatever the oil industry buys so that it has to get more for its own products to meet that greater cost due to those other codes as well as to meet the increased cost of the working of its own code.

An improvement in oil prices which merely provides for cost of recovery, therefore, makes no provision for profit. But no industry or business can continue merely marking time, matching outgo and income without profit or preparation for future necessary investment.

The petroleum industry represents an investment of more than twelve billion dollars. Over a period of 20 years its operations called for an investment of $500,000,000 a year.

If it just met cost without profit where would that money come from? Who would provide for the exploration and expansion necessary to maintain an uninterrupted supply of motor fuel and petroleum products in the years ahead?

Figuring that $1.11 oil would represent average cost of recovery in the Mid-Continent there must be something added to justify continuance in business and further revision of prices is due.

The recent advances in crude, in a measure anticipated rather than marked achievement of the code's object which is yet to be realized. But there is increasing confidence that it will be attained.

The revised allocations of production have been accepted in Oklahoma and Texas and undoubtedly elsewhere, bringing down the total production of crude to 2,338,500 barrels daily, including possible withdrawal of 95,000 barrels from storage which would reduce actual production to 2,243,500 barrels.

The resulting improvement in prices, giving producers more money for less oil and assuring them of a fair market for the oil retained, should assist in enforcement of the code by demonstrating its benefit.

At the same time, regulation and the removal of surplus production will eliminate the opportunity and means of price-cutting and stabilize the situation permanently.

All this, however, will not be automatic. "There ought to be a law" too often stops right there. Laws have to be enforced to be effective, otherwise, like prohibition, they become mere "scraps of paper."

Administrator Ickes, the petroleum administrative board and the Planning and Co-ordinating Committee are fully aware of this. They realize that mere enactment of a code and selection of general administration at Washington cannot be expected to cope with what the industry has had to contend with unsuccessfully for years.

The success or failure of the code and consequently the future of the industry will depend mainly upon the regional committees to which must be entrusted the active enforcement of the regulations laid down at Washington.

These regional committees will, in fact, be the operating agencies of the code upon whose work the supervisory agencies at Washington must rely for actual contact with conditions in the field whether it be in production, manufacturing or marketing.

In other words, we must stop looking to Washington and watch for results from the regional districts where the code will really be put to the test.

Realization of that responsibility should prevent any superficial service on these committees such as is too often associated with committee work. Nothing less than earnest, active attention to the job can secure results. Nor can the work be glossed over with hope that it will be done by others.

It is just that attitude that is responsible for most of the governmental, social and economic evils we complain about. We may dodge our part but we never can dodge the effects which hit everybody, ourselves included.

It will be no consolation or excuse, if the code breaks down, to blame it upon those who violated it, if those whose interest it was to support it stood idly by and let that happen.

It may be wished that each and every member of these regional committees will realize that upon his individual shoulders rests the future of the industry, whether it will continue to be self-governing or whether, through failure of the code, the government is to take it over entirely.

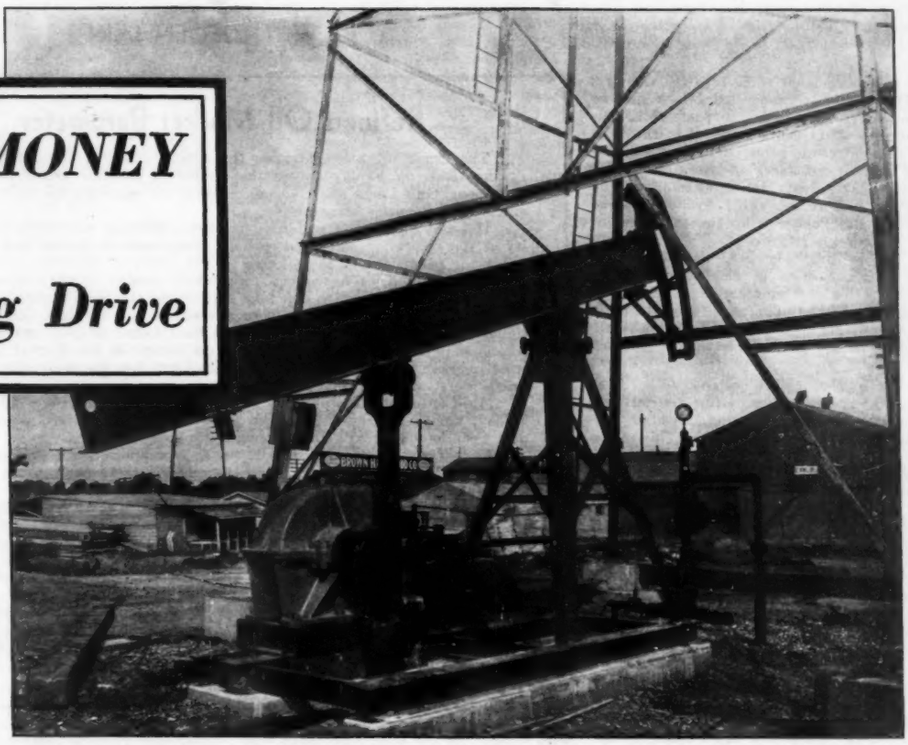
Also, which may be of more immediate interest, whether the industry is to hold and improve the price gains it has made.

Now that we have seen what can be accomplished by stabilizing the industry there should be renewed determination to carry it through and make it stick.

NRA MEMBER U.S. WE DO OUR PART

EAST TEXAS PRODUCERS!

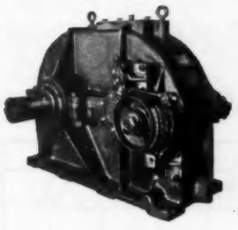
YOU can SAVE MONEY with this Electric Pumping Drive



Ready to pump when the gas pressure drops. Westinghouse weather-proof Motor and Single-crank Gear Unit on a unit pumping power at Kilgore, Texas.

YES... this Westinghouse weather-proof drive can substantially cut your pumping costs.

Being weather-proof, it entirely eliminates pump-house expense . . . it requires only a simple foundation . . . it reduces attendance costs because, with its electric push-button control, one pumper can look after ¼ to ⅓ more wells . . . it reduces maintenance costs because the smooth flow of electric power greatly reduces rod breakage. Operated by electricity, it makes possible the lowest *overall pumping* cost.



Westinghouse Weather-proof Gear Units for unit pumping powers are available in either single or twin-crank types. High efficiency, ranging from 96 to 98 per cent. Anti-friction bearings are used throughout. All gears are of the accurately-cut, helical type with special heat treatment that gives long life. Gears and bearings are automatically lubricated with clean, filtered oil.

Westinghouse Weather-proof Motors for well pumping have high efficiency that assures low cost of operation. Highest quality insulation . . . resists moisture, dust, and oil vapor. Heavy cast construction of frame and brackets maintains accurate bearing alignment. Rotor maintains its balance permanently. Sealed Sleeve Bearings are oil-tight, dust-tight, and weather-proof. Oil supply lasts from six months to a year or more.

Westinghouse Weather-proof Combination Linestarter and Disconnect Switch . . . with push-button control . . . assures simple, reliable and trouble-proof control of the pumping motor. It is encased in a heavy weather-proof steel cabinet. Heavy-duty fusible disconnect switch, in the same cabinet with starter, greatly simplifies wiring and reduces installation cost. A thermal overload relay automatically protects the motor from damage in case the pumping unit is overloaded.

Westinghouse oil field equipment is distributed by the Oil Well Supply Company and, with the exception of reduction gears, by the National Supply Companies, with offices and stores in all oil fields.

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Quality workmanship guarantees every Westinghouse product

Possibility of Sharp Decline in Gasoline Price Is Averted by Advancing Mid-Continent Crude

By W. T. ZIEGENHAIN

Encouragement came into the Group 3 (Oklahoma) refinery market from two important sources in the past week. The advance of 11 cents a barrel in the Mid-Continent crude price on Friday followed by similar advances in all other major midwestern fields definitely stopped the rapid decline of third grade gasoline prices and bolstered up the entire refinery market structure.

The calling together, as the initial meeting, of most of the regional committees for the application of the code was also looked upon as a forceful factor in stabilizing conditions in both the retail and refinery markets over the coming months.

These meetings are designed to get into the real problems confronting the full application of the code and most of the discussion is not made public. This move is interpreted to mean that real benefits will accrue to the common good of the industry and when interpreted in terms of the market, it should mean better prices. This will alleviate the fear of "dump" prices during the coming seasonal slump in consumption. The belief that much good will come from these meetings has prompted many buyers to take a longer-term view of the market and there has been a renewal of buying, particularly from sources having export outlets.

Price Regulation

The crude advance and the calling together of these regional committees have allowed the subject of price fixing to be forgotten for the moment but there are persistent reports that price fixing is still a definite part of the administration program of placing the oil industry on a profitable basis.

In the past month, many refiners have had their views of the spot market distorted by their own ideas of the effect of price fixing. On the one hand, many had visions of considerably higher prices, on the other, an unusually pessimistic attitude has been taken regarding the enforcing of any set of prices that might be established and there was a tendency to "unload."

The group that feels price regulation is inevitable was encouraged by the request of Secretary Ickes on Friday when he called for more data regarding production and refining costs.

The individuals generally interpreted this move to mean that the administration will adopt price fixing as soon as the industry has advanced its quotations to the point where the administration is sure they will yield a reasonable profit. While this upward movement is in progress the new advisory board is having time to consider the cost data the industry has supplied.

If the cost data appear reasonable and if the industry shows it has the ability to support the price structure and to hold it for a reasonable length of time, then the administrator will clinch the deal by fixing prices. Such steps as need to be taken by the oil administrator to aid the industry in arriving at the desired end will be undertaken as quickly as possible in each instance.

Reduce Crude Stocks

Secretary Ickes' order on Friday to the effect that oil production during October be cut 72,000 bbls. daily under the September schedule may be taken as an example of the efforts the administrator will make from time to time to safeguard the general price structure. In the same order he also specified that 95,000 bbls. may be withdrawn from storage daily and allocated the amount of the withdrawals to be allowed among the states in which stocks are most burdensome.

These increasing stocks have proven a handicap among students of the market who have wanted to assume an optimistic position in harmony with the spirit that comes with rising prices but who recognized the growing handicap.

Faced with a lesser seasonal demand for gasoline and other petrolem products, any reduction in the production and stocks of crude oil becomes of major importance in judging the ability of the refinery market to push prices higher and to maintain them over the winter.

Against Price Fixing

That group of market students that feels that the Federal Government has

Refined Oil Market Barometer

The crude oil price advance throughout most of the Mid-West producing fields on Friday stayed the decline of gasoline prices in the Mid-Continent, Gulf Coast and Chicago markets and gave greater stability to the entire refinery price structure.

Hope of higher and stabilized market conditions now rests in the ability of the respective state and regional committee to quickly and forcefully apply the provisions of the oil code.

Export inquiries have been received in greater number over the past week and have materially aided in supporting the coastal gasoline market in what would otherwise have been a week of dull trading. Kerosene continues strong in the Mid-Continent and East Coast markets but recorded a recession in Pennsylvania. There was no change in the neutral and bright stock market but higher prices are predicted for the near future. Wax prices were advanced generally.

Mid-Continent—Third grade gasoline stiffened after the crude advance Friday, but other grades witnessed price shading. Kerosene, wax and natural gasoline strong. Balance unchanged.

East Coast—Improved export market supported the domestic price structure. Wax advanced while steam refined stocks show price reduction of 1 cent in practically every grade.

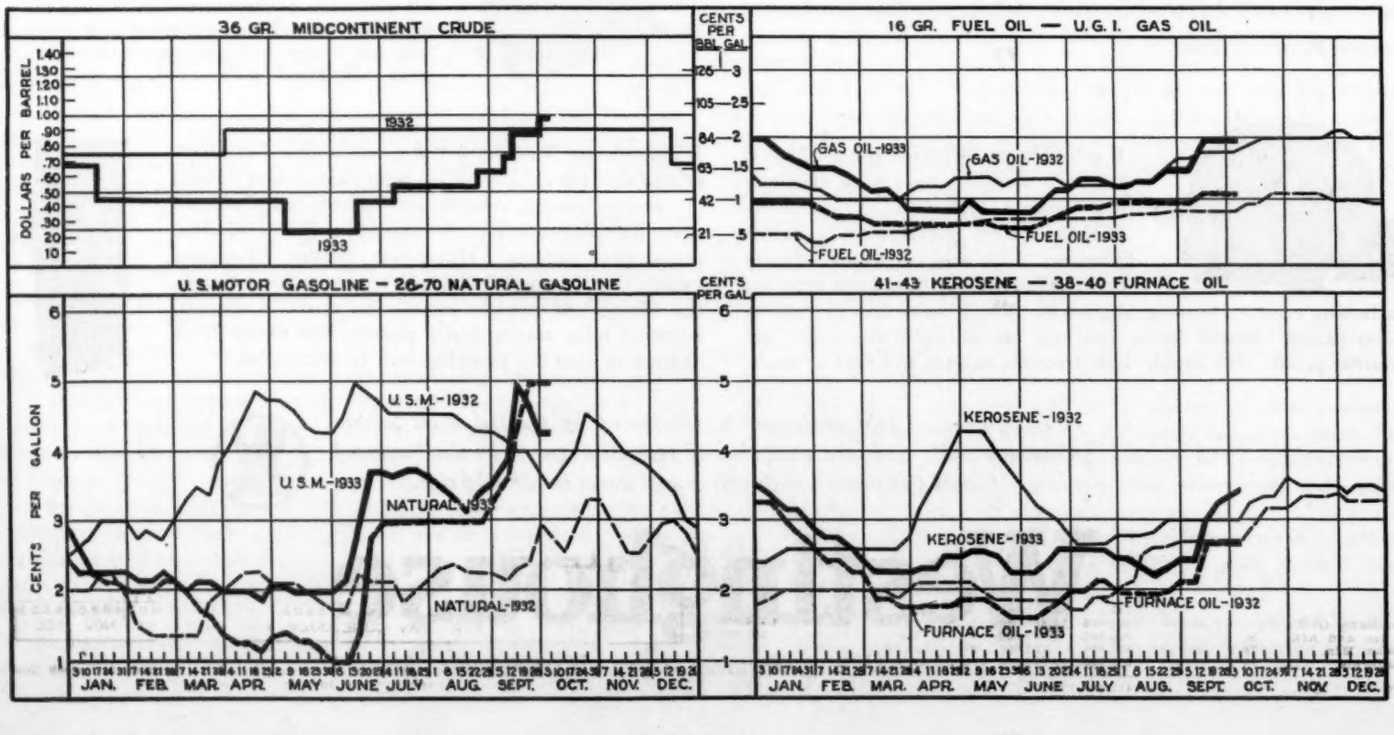
Chicago—The Friday crude price advance checked the tendency for gasoline prices to decline sharply as result of fresh offerings of East Texas gasoline out of refineries and on tracks there. Balance of products unchanged.

California—Gasoline advanced. Diesel fuel strong with balance of heavy products in better position to show price improvement.

Gulf Coast—Improved export market for gasoline with resulting high prices featured the trading. Domestic prices generally unchanged.

Pennsylvania—Gasoline and kerosene weaker as result of failure of expected crude advance to materialize. Other prices unchanged.

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)



no thought of assuming the role of price regulator at this time and at no future time except in the case of an extreme emergency, still has a very strong following. This group points to the week to week delay in any definite announcement of intentions on the part of the administration as meaning that Secretary Ickes is prodding the industry to get its own house in order and using the "threat" of price fixing to promote unity of action but is hopeful that it will not be necessary to force the issue. This group strengthens its arguments by reviewing the action of the officers administering the NRA in other industries in which they have steered away from price fixing. They contend that in some of these industries price regulation could be more easily applied than to the fixing of prices in the oil business.

A majority of the refiners and marketers agree that something definite on the question of price fixing will need to come within the next two weks if it is to come at all. Many who expect such a move to be taken have set the first half of October as the time in which a definite program of price fixing will be announced.

Natural Gasoline

All grades of natural gasoline continued strong. The 26-70 grade was firmly established at 5 cents and the 18-55 grade was equally well established at 6 cents flat. Manufacturers do not report much business in the low vapor pressure grades and the prices shown are the result of the sale of a very few cars. The price of the low vapor pressure grades approach closely to the 18-55 grade because we are moving into a season when a larger percentage of light fractions is not only permitted but desired. Because of this, the 11 and 15-pound grades were selling at only about one-quarter cent above the 18-pound grade.

Gasoline

The 3⅝-cent price for low octane gasoline that was being offered out of East Texas early in the week was removed as soon as announcement came of the general Mid-Continent crude price advance on Friday. These refiners have added from one-fourth to three-eighths cent to their quotations and the lowest now quoted out of East Texas and North Texas is 3⅞ cents basis Group 3. A strong effort is being made to get the spot market to a minimum of 4 cents and there is hope that a 4¼-cent market can be established there.

Even though the proposed quotations are established, it is pointed out that the ordinary skimming plant in East Texas will not be able to show a profit when paying the newly posted crude price. With the production of crude further curtailed, and the likelihood that crude prices will not be shaded, there is ample reason to believe that the effort to establish a 4 to 4¼-cent minimum will meet with success.

The price of the regular grade of gasoline was reduced one-fourth cent in the past week, more as the result of the weak third grade price than because of any change in its own statistical position. Actually there was more of this material moving than a week ago and the market was helped by the improved export buying. However, these factors were not interpreted in the quotations.

Kerosene

Kerosene advanced one-eighth cent during the week and was the only product in which there was active trading. Many of the inquiries showed evidence of buying for storage in anticipation of a stronger kerosene market throughout the winter. The 41-43 grade at 3¼ cents was well established and those refiners who were quoting 3⅜ cents report enough business to move all of their production.

Furnace Oil and Distillates

The distillate market was as strong as a week ago. Quotations were generally unchanged but the tone of the trading was more indicative of a future price advance than any suggestion of price shading to move production.

It is common practice for the household consumers to fill their tanks in the spring to avoid the chance of sweating and corrosion during the summer season. Until this material is used there will not be any great volume of consumer buying. So, except for new burner installations and what business will result from later consumer buying, there is a chance that distillate and furnace oil prices will not be advanced as sharply as many believe likely.

Gas Oil and Fuel Oils

The low cold test fuel oils were again favored in the trading and their prices were firm. The balance of the gas oil market was unchanged. Heavy fuel oil prices did not advance following the crude price advance as might have been expected during normal times, because many buyers and sellers had anticipated the market weeks ago. Until increased industrial activity and the winter weather calls for an increase in fuel consumption, it is not likely that any sharp change will come about in prices.

Lubricants and Wax

All grades of neutrals and bright stocks assumed a stronger tone in the trading but there were no important price changes. There was no unusual buying which followed the crude price advance as might be expected even though this crude price advance has been taken as the basis for strong efforts now being made to establish a new and high price level. This action is being stayed by only a few refiners but they are of sufficient importance that a higher schedule could not be maintained without their support.

Removal of 1 Cent Emergency Rail Rate to Benefit Mid-Continent Refiners

CHICAGO, Oct. 2.—Mid-Continent refiners will benefit to the extent of many thousands of dollars annually by a reduction in freight rates on petroleum products moving from the Mid-Continent to destinations west of the Illinois-Indiana line, which became effective October 1.

The reduction arose from the elimination on that date of the emergency rate increase allowed by the Interstate Commerce Commission effective January 4, 1932, amounting to 1 cent per 100 pounds on gasoline and products taking a similar classification and a proportionate amount on fuel oils.

On and after January 4, 1932, the railroads were authorized to assess surcharges in varying amounts on practically all commodities, except agricultural and commodities involved in certain decisions of the commission, in which what it termed maximum rates had been prescribed, among which were Dockets 17,000 Part 4 and Part 4-A involving rates on petroleum products within the Southwest; within the territory lying east of the Illinois-Indiana state line and south of the Ohio and east of the Mississippi Rivers; and on shipments of petroleum from the Southwest to this territory.

The surcharge authorized on petroleum was 1 cent per 100 pounds on carload shipments and 2 cents per 200 pounds on less than carload shipments, subject to a maximum of 10 per cent of the applicable rate.

The principal relief to the Mid-Continent Field will be the elimination of the 1-cent emergency charge on carload petroleum shipments to all points west, northwest and north of Kansas, Oklahoma and Texas; on and north of the Missouri River, including Kansas City and St. Louis; all of Illinois and all points north and west thereof; on export shipments, and on interstate shipments of crude oil in the Southwest, except where rates have been established for competitive purposes. Also the elimination of the 2-cent per 100 emergency charge on less than carload petroleum shipments.

It has been estimated that the emergency rate increase thus made effective through the last 21 months has placed an added average rate burden of nearly 3 per cent of the freight charges on business arising in the Mid-Continent for destinations in the territory indicated above.

At the same time, some minor changes on rates for petroleum shipments within and out of the Chicago region also became effective October 1. Rate from Lemont to points in the Chicago switching district was reduced 10 per cent. District switching charges are unchanged. The rate from Chicago to Milwaukee has been reduced to .89 cent a gallon on gasoline and .59 cent a gallon on fuels.

As an example of the change on Mid-Continent origin rates, the new gasoline rate to Chicago from Group 3, Oklahoma, is 36 cents per 100 pounds, against 37 cents under the emergency increase, making the gallon rate 2.38 cents against 2.44 cents previously. The new fuel oil rate to Chicago is 29 cents per 100, making the gallon rate 2.15 cents against 2.22 cents previously.

The following table shows the new petroleum rate structure on both gasoline and fuel oil classifications from Group 3.

Destination—	Rate per 100 lbs. gasoline	Gal.	100 lbs. fuel oil	Gal.
Chicago	36	.0238	.29	.0215
Milwaukee	395	.0261	.315	.0229
Minneapolis-St. Paul	42	.0277	.335	.0248
Des Moines	33	.0218	.265	0196
Kansas City, Mo.	.255	.0168	.205	.0152
Omaha	.33	.0218	.265	.0196
Sioux City	36	.0238	.29	.0215
St. Louis	.30	.0198	.24	.0176
Cleveland	58	.0383	.465	.0344
Toledo	.54	.0356	.43	.0318
Detroit	58	.0383	.465	.0344
Memphis	33	.0218	265	.0196

American Petroleum Institute Weekly Refinery Statistics

Figures below reported for week by American Petroleum Institute. (1) Per cent refinery capacity represented. (2) Daily average crude runs to stills. (3) Total motor fuel stocks. (4) Gas oil and fuel oil stocks. All figures in 42-gallon barrels.

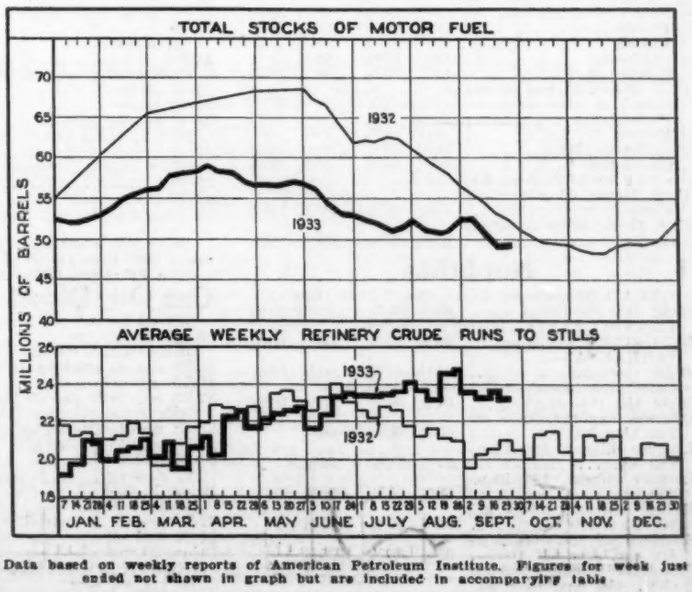
Week Ending September 30, 1933, Compared to Week Ago

	Week ending September 30, 1933 (1)	(2)	(3)	(4)	Week ending Sept. 23, 1933 (1)	(2)	(3)	(4)
East Coast	100.0	477,000	13,541,000	9,209,000	100.0	443,000	13,460,000	9,160,000
Appalachian	92.6	89,000	1,894,000	842,000	92.6	103,000	1,808,000	845,000
Ind., Ill., Ky.	97.3	330,000	6,593,000	5,774,000	97.3	367,000	6,472,000	5,650,000
Okla., Kans. Mo.	82.1	266,000	5,215,000	4,354,900	82.1	265,000	4,833,000	4,208,000
Inland Texas	58.7	88,000	1,325,000	1,813,000	58.7	95,000	1,259,000	1,830,000
Texas Gulf	98.0	447,000	5,545,000	7,039,000	98.0	393,000	6,022,000	7,213,000
Louisiana Gulf	100.0	93,000	1,262,000	1,860,000	100.0	135,000	1,382,000	2,030,000
N. La. and Ark.	92.6	49,000	225,000	663,000	92.6	53,000	219,000	656,000
Rocky Mtn.	78.8	34,000	805,000	723,000	78.8	35,000	798,000	718,000
California	96.9	439,000	14,052,000	99,289,000	96.9	460,000	13,691,000	98,641,000
Total U. S.	92 2	2,312,000	50,457,000	131,566,000	92.2	2,339,000	49,944,000	130,951,000

Total motor fuel stocks Bureau of Mines basis 52,300,000 bbls.

Week Ending September 30, 1933, Compared to Year Ago

	Week ending September 30, 1933 (1)	(2)	(3)	(4)	Week Ending Oct. 1, 1932 (1)	(2)	(3)	(4)
East Coast	100.0	477,000	13,541,000	9,209,000	99 1	444,000	13,922,000	9,290,000
Appalachian	92.6	89,000	1,894,000	842,000	95 0	80,000	1,666,000	943,000
Ind., Ill., Ky.	97.3	330,000	6,593,000	5,774,000	97.5	281,000	6,740,000	4,184,000
Okla., Kans. Mo.	82.1	266,000	5,215,000	4,354,900	88.4	211,000	4,556,000	3,250,000
Inland Texas	58.7	88,000	1,325,000	1,813,000	72.1	91,000	1,310,000	2,057,000
Texas Gulf	98.0	447,000	5,545,000	7,039,000	98.2	375,000	4,930,000	10,405,000
Louisiana Gulf	100.0	93,000	1,262,000	1,860,000	97 3	72,000	1,410,000	4,216,000
N. La. and Ark.	92.6	49,000	225,000	663,000	94.6	39,000	199,000	565,000
Rocky Mtn.	78.8	34,000	805,000	723,000	91 4	26,000	1,322,000	492,000
California	96.9	439,000	14,052,000	99,289,000	94.6	435,000	15,090,000	100,270,000
Total U. S.	92 2	2,312,000	50,457,000	131,566,000	93 6	2,054,000	51,145,000	135,672,000



Data based on weekly reports of American Petroleum Institute. Figures for week just ended not shown in graph but are included in accompanying table

REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

EXCLUSIVE OF TAXES

The following quotations are exclusive of the Federal excise taxes of 1½ cents a gallon on gasoline and 4 cents on lubricating oils, which became effective June 17, 1933.

Refinery Gasolines

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
*U. S. Motor grades:				
Third grade	.04¼	.04½	.04¼	.04½
Regular	.05	.05½	.05¼	.05½
Premium	.05¾		.05¾	
60-62 400 grades:				
Third grade	.04½	.04¾	.04⅝	.04¾
Regular	.05¼	.05½	.05¼	.05⅝
Premium	.05¾	.06	.05¾	.06
64-66 390	.04⅞	.05	.04⅞	.05
64-66 375	.05		.05	
68-70 350	.05¼		.05¼	
NORTH TEXAS—				
U. S. Motor grades:				
Third grade	.04	.04¼	.04⅛	.04¾
Regular	.04⅞	.05¼	.05⅛	.05⅜
Premium	.05⅝	.05¾	.05⅝	.05¾
60-62 400	.04¾	.05	.05	
64-66 390	.05	.05⅛	.05	.05⅛
64-66 375	.05⅛	.05¼	.05⅛	.05¼
64-66 360	.05¼	.05½	.05¼	.05½
†NORTH LOUISIANA—				
U. S. Motor grades:				
Third grade	.04½	.04¾	.04½	.04¾
Regular	.05½		.05½	
Premium	.06		.06	
60-62 400	.04¾		.04¾	.05
†ARKANSAS—				
U. S. Motor grades:				
Third grade	.04½	.04¾	.04½	.04¾
Regular	.05½		.05½	
Premium	.06		.06	
CHICAGO (based on Oklahoma Group 3)—				
U. S. Motor grades:				
Third grade	.04¼	.04½	.04⅝	.05
Regular	.05	.05¼	.05⅛	.05⅜
Premium	.05½	.05¾	.05⅝	.06⅛
60-62 400	.04⅜	.04½	.04⅞	.05¼
64-66 375	.04⅝	.04⅞	.05¼	.05½
68-70 360	.04⅞	.05⅛	.05⅝	.05⅝
Aviation fighting grade	.05½	.05¾	.05¾	.06¼

*Octane Ratings—The following octane ratings apply to the three grades of U. S. Motor gasoline: Regular 60-64 octane number, premium 65 and above octane number; third grade, 59 and below octane number. Octane ratings determined by C.F.R. Motor Method.

PENNSYLVANIA (inland refineries)—				
U. S. Motor	.05¾	.06	.05½	.05¾
60-62 400	.05⅞	.06⅛	.05⅝	.05⅞
64-66 375	.06¼	.06½	.06	.06¼
68-70 350	.06½	.06¾	.06½	.06¾
CALIFORNIA (domestic movement)—				
54-58 U. S. Motor	.08	.09	.07¾	.09
58-60 400	.08	.09½	.08½	.09½
EAST COAST—				
U. S. Motor, below 65 octane:				
New York (Bayonne)	.06¼	.06½	.06¼	.06½
Philadelphia	.06¼	.06½	.06¼	.06½
Boston	.06½	.06¾	.0670	.0695
Baltimore	.06¼	.06½	.06¼	
Charleston, S. C.	.06¼	.06½	.06¼	.06½
U. S. Motor, 65 and above:				
New York (Bayonne)	.06½	.06¾	.06½	.06¾
Philadelphia	.06½	.06¾	.06½	.06¾
Boston	.06½	.06¾	.0675	.07
Baltimore, Md.	.06½	.06¾	.06½	.06¾
Charleston, S. C.	.06½	.06¾	.06½	.06¾
GULF COAST (domestic)—				
U. S. Motor, 65 octane and above	.05¾	.05⅞	.05¾	.05⅞
U. S. Motor, below 65 octane number	.05⅜	.05½	.05⅜	.05½

Naphthas

OKLAHOMA (Group 3)—	Oct. 3		Sept. 26	
50-52 450 (blending)	.04½	.04¾	.04½	.04¾
PENNSYLVANIA (inland refineries)—				
50-54 430-450 (blending)	.05½	.05¾	.05½	.05¾
†ARKANSAS—				
48-50 (blending)	.04½	.04¾	.04½	.04¾
CHICAGO (based on Oklahoma Group 3)—				
50-52 450 (blending)	.04¼	.04¾	.04½	.04¾
Cleaners' naphtha, 56-58 gr., 200 i.b.p.-320 e.p.	.06½	.06⅝	.06½	
Lacquer diluent, 180 i.b.p.-250 e.p.	.07¾	.07⅞	.07¾	
Lacquer diluent, 140 i.b.p.-200 e.p.	.08¾	.08⅞	.08¾	
Rubber solvent, 68-70 gr., 100 i.b.p.-300 e.p.	.06¼	.06⅜	.06¼	
Stoddard solvent, 300 i.b.p.-410 e.p., over 83° flash	.05¾	.05⅞	.05¾	
Petroleum thinner, 290-300 i.b.p., 415 e.p., over 83° flash	.05¾			
V.M.&P. naphtha, 56-58 gr., 190-200i.b.p.-330 e.p.	.06	.06⅛	.06	
Petroleum spirits	.05¼	.05⅜	.05¼	

Natural Gasolines

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
Grade 18-55	.06		.06	
Grade 26-70	.05		.05	
Grade 30-70	.04¾		.04¾	
Low vapor pressure grades:				
15 lb. v.p. (max.)	.06¼		.06	.06¼
11 lb. v.p. (max.)	.06¼	.06½	.06¼	
NORTH TEXAS—				
Grade 18-55	.05⅞		.05⅞	
Grade 26-70	.04⅞	.05	.04⅞	.05
Grade 30-70	.04⅝		.04⅝	
Low vapor pressure grades:				
15 lb. v.p. (max.)	.06		.06	
11 lb. v.p. (max.)	.06	.06¼	.06	.06¼
NORTH LOUISIANA—				
Grade 26-70	.05⅛		.05⅛	
CALIFORNIA—				
75-85 375	.06	.07	.05¾	.07

Kerosenes

(All kerosenes water white)

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
41-43	.03½	.03¾	.03⅝	.03½
42-44	.03⅝	.03⅞	.03½	.03¾
NORTH TEXAS—				
40-41	.03⅛	.03¼	.03	.03⅛
41-43	.03¼		.03⅛	.03⅜
†NORTH LOUISIANA—				
41-43	.03¾	.04	.03¾	.04
42-44	.04	.04⅛	.04	.04⅛
†ARKANSAS—				
41-43	.03⅞	.04	.03⅞	.04
PENNSYLVANIA (inland refineries)—				
45	.04¾	.05	.05	.05¼
46	.05	.05¼	.05⅛	.05⅜
47	.05⅛	.05⅜	.05⅜	.05⅝
CHICAGO (based on Oklahoma Group 3)—				
41-43	.03⅜	.03½	.03¾	.03⅝
42-44	.03½	.03⅝	.03½	.03¾
*CALIFORNIA—				
38-40 high burning test	.04¼	.04¾	.04¼	.04¾
NEW YORK (Bayonne, N. J.)—				
41-43	.05½		.05½	
GULF COAST (domestic)—				
41-43 water white	.04⅛	.04⅜	.04	.04¼

*For Pacific Coast consumption.
†For Arkansas, Louisiana and Mississippi delivery.

Furnace Oils and Tractor Fuels

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
32-36 straw	.02⅞	.03⅛	.02⅞	.03⅛
36-38 straw	.02⅝		.02⅝	
38-40 straw	.02⅞	.03¼	.02⅞	.03¼
39-41 prime	.03		.03	
NORTH TEXAS—				
38-40 straw	.02⅝	.02¾	.02⅝	.02¾
†NORTH LOUISIANA—				
36-40	.03		.03	
†ARKANSAS—				
32-36	.03		.03	
CHICAGO (based on Oklahoma Group 3)—				
32-36 straw	.02¾	.03	.02¾	.03
38-40 straw	.02⅞	.03⅛	.02⅞	.03⅛
38-40 prime white	.03	.03⅛	.03	.03¼
PENNSYLVANIA (inland refiners)—				
40-41 prime white	.04	.04⅛	.04	.04⅛
NEW YORK (Bayonne, N. J.)—				
36-40	.05½		.05½	
32-36 No. 2 grade	.04½		.04½	
21 (industrial)	.04		.04	

Above prices are for distillate oils of zero cold test under 190° flash and good odor.
†For Arkansas, Louisiana and Mississippi delivery.

Gas Oil, Diesel Oil and Fuel Oil

Gas oil quoted per gallon basis; Diesel oil and fuel oil per barrel.

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
32-36 gas oil cracking stock	.01⅞	.02⅛	.01⅞	.02⅛
U.G.I. gas oil	.02		.02	
32-36, zero to 15 gas oil, high flash	.02¼	.02⅜	.02¼	.02⅜
28-30, zero to 10 fuel oil	.80	.85	.80	.85
26-30, zero to 10 fuel oil	.80		.80	
24-26 fuel oil	.60	.65	.60	.65
20-22 fuel oil	.55	.60	.55	.60
Below 16 fuel oil	.50	.55	.50	.52½
NORTH TEXAS—				
32-36 gas oil, industrial	.02		.02	
22-26 fuel oil	.57½	.62½	.57½	.62½
Below 20 fuel oil	.47½	.50	.47½	.50
†NORTH LOUISIANA—				
32-36 gas oil, zero	.03		.03	
14-16 fuel oil	.50	.60	.50	.60
†ARKANSAS—				
30-32 gas oil, zero	.02¾	.03	.02¾	.03
14-16 fuel oil	.50	.55	.50	.55
CHICAGO (based on Oklahoma Group 3)—				
32-36 gas oil, industrial	.01¾	.02	.01⅞	.02⅛
28-30 (zero) fuel oil	.85	.95	.85	.95
26-28 (zero) fuel oil	.75	.80	.75	.80
22-26 (zero) fuel oil	.65	.70	.65	.70
18-22 (zero) fuel oil	.57½	.62½	.60	.62½
Below 18 fuel oil	.45	.50	.45	.50

Note: Fuel oils of more than 40 cold test generally 5 to 15 cents per barrel less in all areas than shown in above tables.
†For Arkansas, Louisiana and Mississippi delivery.

PENNSYLVANIA (inland refineries)—				
36-40	.03⅝	.03¾	.03⅝	.03⅞
CALIFORNIA—				
30-34 gas oil per bbl.	.90	1.05	.90	1.00
27 plus Diesel	.90	1.00	.85	1.00
15-19 bunker (at tidewater)	.55	.65	.55	.65
15-19 (cargo lots)	.50	.60	.50	.60
15-19 (tank cars)	.45	.60	.45	.55
GULF COAST—				
28-30 gas oil	.03		.03	.03¼
28-30 Diesel	1.70	1.80	1.60	
Bunker C (bulk cargoes)	.92½	.95	.92½	.95
Bunker C (bunkers)	.95		.95	
NEW YORK (Bayonne, N. J.)—				
28 plus, gas oil	.04½		.04½	
*28-30 Diesel	1.95		1.95	
28-30 Diesel (tank cars)	.04½		.04½	
†Bunker C	1.10		1.10	

*Lighterage 6½ cents per barrel.
†Contract price at New York Harbor to ocean-going steamships only.

Petroleum Coke*

Prices per ton f.o.b. refineries in Chicago area.

	Oct. 3	Sept. 26	
Pile run (screenings)	5.25	5.25	
Direct from still	6.25	6.25	
Lump and egg	7.00	7.00	7.25

*Refineries will absorb freight to 80 cents a ton.

Neutral Oils

(Viscosity at 100° F. and color)

	Oct. 3		Sept. 26	
OKLAHOMA (Group 3)—				
Zero to 10 Cold Test:				
150-3	.07¼	.07½	.07¼	.07½
180-3	.08½	.08¾	.08½	.08¾
180-4	.08¼	.08½	.08¼	.08½
200-3	.09	.09¼	.09	.09¼
200-4	.08¾	.09	.08¾	.09
240-3	.11	.11¼	.11	.11¼
240-4	.10¾	.11	.10¾	.11
280-3	.12	.12¼	.12	.12¼
280-4	.11½	.11¾	.11½	.11¾
300-3½	.12¾	.13	.12¾	.13
350-3½	.13¾	.14	.13¾	.14
400-4	.14¾	.15	.14¾	.15
5 0-4½	.15¾	.16	.15¾	.16
100-2 paraffin oil	.05¼	.05½	.05¼	.05½
15-30 Cold Test:				
200-3	.08¼	.08½	.08¼	.08½
200-4	.08	.08¼	.08	.08¼
240-3	.10¼	.10½	.10¼	.10½
240-4	.10	.10¼	.10	.10¼
280-3	.11¼	.11½	.11¼	.11½
280-4	.11	.11¼	.11	.11¼
PENNSYLVANIA—				
150 vis., No. 3, 400-405:				
Zero pour test	.17	.17½	.17	.17½
10 pour test	.16½	.16¾	.16½	.16¾
15 pour test	.15	.15¼	.15	.15¼
25 pour test	.14¼	.14½	.14¼	.14½
180 vis., No. 3, 25 pour test	.16¾	.17	.16¾	.17
200 vis., No. 3:				
Zero pour test	.21½	.21¾	.21½	.21¾
10 pour test	.20½	.20¾	.20½	.20¾
15 pour test	.19½	.19¾	.19½	.19¾
25 pour test	.19¼	.19½	.19¼	.19½
GULF COAST—				
Pale Oils:				
100-2-2½	.04½		.04½	
200-3	.05¾	.06	.05¾	.06
300-3	.06½		.06½	
500-3½	.07½	.07½	.07¼	.07½
750-3½	.08¼	.08¾	.08¼	.08¾
1,200-3½	.09	.09½	.09	.09½
2,000-4	.10	.10¼	.10	.10¼
Red Oils:				
200-5-6	.04½		.04½	
300-5-6	.05½	.05⅝	.05½	.05⅝
500-5-6	.06¼	.06½	.06¼	.06½
750	.07¼	.07½	.07¼	.07½
1,200-5-6	.08	.08½	.08	.08½

2,000-6 plus	.09	.09¼	.09	.09¼
CALIFORNIA—				
Pale Oils:				
100-2½-3	.09	.09½	.09	.09½
200-2½-3	.09½	.10	.09½	.10
300-3-3½	.10½	.11	.10½	.11
350-3-4	.11	.11½	.11	.11½
400-3-4	.11½	.11¾	.11½	.11¾
450-3-4	.11¾	.12	.11¾	.12
500-3-4	.12	.12½	.12	.12½
Red Oils:				
200-4-5	.09½	.10	.09½	.10
300-5-6	.10½	.11	.10½	.11
350-5-6	.11	.11½	.11	.11½
400-5-6	.11½	.11¾	.11½	.11¾
450-5-6	.11¾	.12	.11¾	.12
500-5-6	.12	.12¼	.12	.12¼
600-5-6½	.12¼	.12½	.12¼	.12½
700-6½ plus	.12½	.12¾	.12½	.12¾
750-6½ plus	.12¾	.13	.12¾	.13
900-6½ plus	.13	.14	.13	.14

Bright and Steam Refined Stocks

OKLAHOMA (Group 3)—	Oct. 3		Sept. 26	
630 light green	.06¾	.07¾	.06¾	.07¾
600 light green S.R.	.06¼	.07¼	.06¼	.07¼
600 dark green S.R.	.04¾	.05¾	.04¾	.05¾
Bright Stocks:				
190-200 D	.24	.25	.24	.25
150-160 D, 0-10	.22¼	.22½	.22½	
150-160 D, 10-25	.21¾		.21¾	
150-160 D, 25-40	.21¼		.21¼	
150-160 E	.20½		.20½	
PENNSYLVANIA—				
600 S.R.	.15½	.15¾	.15½	.15¾
650 S.R.	.17¾	.18	.17¾	.18
600 Pennsylvania flash	.18¾	.19	.18¾	.19
650 D filtered	.23¼	.23½	.23¼	.23½
600 E filtered	.18¾	.19	.18¾	.19
Pennsylvania Grade bright stock:				
No. 8 color, 145-50 at 210; 540-550 flash:				
10 pour test	.27½	.27¾	.27½	.27¾
15 pour test	.26	.26½	.26	.26½
25 pour test	.25	.25½	.25	.25½

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	Oct. 3		Sept. 26	
124-126 white crude scale	.03½	.03¾	.03¼	.03½
PENNSYLVANIA—				
122-124	.03⅝	.03⅞	.03⅝	.03⅞
124-126	.03⅞		.03¾	.03⅞
NEW YORK HARBOR—				
120-122 (a.m.p. basis)	.0362		.0350	.0360
125-127	.0375	.0380	.0375	.0380
130-132	.0420		.0420	
133-135	.0480		.0480	
135-137	.0505		.0505	
Petrolatum in barrels in carload lots:				
Dark green	.01⅝		.01⅝	
Amber	.02¼	.02½	.02¼	.02½
Extra amber	.02⅜		.02⅜	
Lily white	.06	.06¼	.06	.06¼
Snow white	.07	.07¼	.07	.07¼
Cream	.04¼	.05	.04¼	.05
CHICAGO (f.o.b. switching district)*—				
122-124	.0440	.0450	.0440	.0450
125-127	.0465	.0475	.0465	.0475
127-129	.0480	.0490	.0480	.0490
130-132	.0540	.0550	.0540	.0550
132-134	.0565	.0575	.0565	.0575

*Cents per pound on carlot orders in burlap bags of 225 lbs. approx.
Add 3° F. a.m.p.

Export Prices

GASOLINE

GULF COAST—	Oct. 3		Sept. 26	
U. S. Motor	.05⅜	.05½	.05¼	.05⅜
60-62 400	.05½	.05⅝	.05⅜	.05½
61-63 390	.05⅝	.05¾	.05½	.05⅝
64-66 375	.06		.05¾	.05⅞
LOS ANGELES, CALIF.—				
U. S. Motor grades:				
53-55 octane	.04½	.05	.04½	.05
55-65 octane	.05	.05¼	.05	.05¼
65-67 octane	.05½	.06	.05½	.06
67-69 octane	.06¼	.06¾	.06¼	.06¾
Above 65 octane	.07	.08		
58-60 400 endpoint	.05	.06	.05	.06
KEROSENE				
GULF COAST—				
41-43 prime white	.04½		.04½	
41 water white	.04¼	.04⅜	.04¼	.04⅜
LOS ANGELES, CALIF.—				
41-43 water white	.03¾	.04¼	.03¾	.04¼
LUBRICANTS				
NEW YORK (f.a.s. in bbls.)—				
600 Warren E	.26¼		.26¼	
600 S. R. unfiltered	.22		.23	
650 S.R. unfiltered	.24½		.25½	
600 flash S.R.	.25½		.26¼	
630 flash S.R.	.30¼		.31¼	
Bright stock, No. 8 color	.33		.33	
Bright stock, No. 6½ color, dil.	.32		.32	
NEUTRALS				
NEW YORK—Pale Engine Oil, Bulk (vis. at 100)—				
230-3¾	.13	.13½	.13	.13½
180-3¼	.12	.12½	.12	.12½
100-2¼	.06		.06	
Red Engine Oil, Bulk (vis. at 100):				
300-6½	.09	.10	.09	.10
250-6	.08¾	.09¼	.08¾	.09¼
200-6	.08½	.08¾	.08½	.08¾
PARAFFIN WAX (Fully Refined)				
NEW YORK (prices per pound)—				
123-125 a.m.p.	.04⅛	.04¼	.03⅝	.03¾
125-127 a.m.p.	.04¼	.04⅜	.03¾	.03⅞
130-132 a.m.p.	.04¾	.04⅞	.04¼	.04⅜
133-135 a.m.p.	.05¼	.05⅜	.04¾	.04⅞
135-137 a.m.p.	.05½	.05⅝	.05	.05⅛

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

East Texas	$1.00
Stratman, Kans. (Sept. 29, 1933)	1.08
Corsicana (heavy) (June 17, 1933)*	.30
Other fields	(See gravity table)

Note—In East Texas, effective September 30, 1933, by Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Shell Petroleum Corp., Gulf Pipe Line Co., Tide Water Oil Co., Sinclair Prairie Oil Marketing Co., Magnolia Petroleum Co., Sun Oil Co., Panola Pipe Line Co. and Empire Oil & Refining Co.
*Magnolia Petroleum Co. †Eldorado Refining Co.

West Texas

Crane, Upton, Crockett, Howard, Glasscock, Mitchell (Sept. 29, 1933)	$.75
Ector, Winkler and Pecos Counties and Lea County, New Mexico (Sept. 29, 1933)	.70
Jones and Fisher Counties	See gravity table

Note—Effective September 29, 1933, by Humble Oil & Refining Co., Texas Co., Gulf Pipe Line Co., Shell Petroleum Corp., Magnolia Petroleum Co., and by Stanolind Oil & Gas Co. in Winkler County, Texas.
*Shell Petroleum Corp.

Gulf Coast

Grade A and Grade B specifications discontinued by leading buyers	(See gravity table)
Tomball (see note)*	$1.15
Livingston (Sept. 29, 1933)	1.00
Greta (Sept. 29, 1933)	.85
Refugio, light	(See gravity table)
Refugio, heavy (Sept. 29, 1933)‡	.85
Markham and High Island	(See Gulf Coast gravity table)
Conroe	(See Conroe gravity table)

Note—Tomball, effective September 29, by Humble Oil & Refining Co., and October 2 by Magnolia Petroleum Co.
*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy, by Humble Oil & Refining Co.

South Central and Southwest Texas

(See note below table)

Darst Creek	$.87
Mirando	.80
Luling (Sept. 29, 1933)	.75
Pettus	1.05
Salt Flat	.87
Lytton Springs (Sept. 29, 1933)	.95
Duval County (Sept. 29, 1933)	.80
Saxet	.85

Note—Effective on September 29 by Humble Oil & Refining Co. in Darst Creek, Mirando, Pettus, Salt Flat and Saxet. Effective September 29 in Darst Creek by Gulf Pipe Line Co. and Texas Co. Effective October 2 by Magnolia Petroleum Co. Effective in Pettus and Salt Flat on September 29 by Humble Oil & Refining Co. and Gulf Pipe Line Co. Luling and Lytton Springs by Magnolia Petroleum Co. Duval County by Texas Co. Saxet, effective September 29, by Humble Oil & Refining Co. and Texas Co.

Rocky Mountain States

Iles, light (Sept. 29, 1933)	$.96
Iles, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.30
Fort Collins and Wellington, Colo. (June 17)	(See Salt Creek prices)
Big Muddy (Sept. 29, 1933)	1.01
Frannie, light (Sept. 29, 1933)	.87
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and La Barge (Sept. 9, 1933)	See Stanolind Mid-Continent price schedule
Grass Creek, light (Sept. 29, 1933)	1.18
Grass Creek, heavy (Dec. 16, 1932)	.45
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Dutton Creek (July 8, 1933)	See Mid-Continent gravity prices
Lance Creek (Dec. 16, 1932)	.92
Poison Spider (Mar. 5, 1931)	.70
Hudson (June 2, 1931)	.65
Lander (Mar. 5, 1931)	.40
Rex Lake (Feb. 22, 1930)	1.10

(Continued on Page 31)

Crude Oil Gravity Table

Degrees gravity—	1 Oklahoma and Kansas	2 North Texas, Central Texas and East Central Texas	3 North Louisiana and Arkansas	4 Gray County, Texas	5 Carson, Hutchinson and Moore Counties, Texas	6 Conroe, Texas	7 Salt Creek, Wyo.	8 Gulf Coast, Texas and Louisiana	9 Gulf Coast, Texas and Louisiana	10 Caddo, Louisiana	11 Sabine-DeSoto, Louisiana	12 Homer, Louisiana	13 Sarepta-Carterville, Louisiana	14 El Dorado, Arkansas	15 Haynesville, Louisiana	16 Miller County, Arkansas	17 Cotton Valley, Louisiana
Below 20	....	....	....	....	....	....	....	$.82	$.82	....	....	....	....	....	....	....	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....	....	....	....	....	....	....	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....	....	....	....	....	....	....	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....	....	....	....	....	....	....	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....	....	....	....	....	....	....	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....	....	....	....	....	....	....	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.62	$.69	$.71	$.75	$.75	$.65	$.62	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	.65	.71	.73	.77	.77	.67	.64	.72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.67	.73	.75	.79	.79	.69	.66	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.69	.75	.77	.81	.81	.71	.68	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.71	.77	.79	.83	.83	.73	.70	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....	....	....	....	....	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.73	.79	.81	.85	.85	.75	.72	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.75	.81	.83	.87	.87	.77	.74	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.77	.83	.85	.89	.89	.79	.76	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.79	.85	.87	.91	.91	.81	.78	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.81	.87	.89	.93	.93	.83	.80	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.83	.89	.91	.95	.95	.85	.82	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....	....	....	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.12	1.09	.85	.91	.93	.97	.97	.87	.84	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.12	1.10	.87	.93	.95	.99	.99	.89	.86	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.12	1.11	.89	.95	.97	1.01	1.01	.91	.88	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.12	1.12	.91	.97	.99	1.03	1.03	.93	.90	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.12	1.13	.93	.99	1.01	1.05	1.05	.95	.92	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.12	1.14	.95	1.01	1.03	1.07	1.07	.97	.94	1.02

*The following companies purchasing crude oil in Kansas or Oklahoma, or both, begin their price schedules: Below 25 degrees, 76 cents; 25-25.9 degrees, 78 cents, with 2 cents added for each degree upward to 40 and over at $1.08: Carter Oil Co., Magnolia Petroleum Co., Pure Oil Co., Rock Island Refining Co., Shell Petroleum Corp., Sinclair Prairie Oil Marketing Co., Skelly Oil Co. and Wilcox Oil & Gas Co. All others begin their schedule at below 29 degrees, 84 cents, excepting Phillex Oil Co. which begins with below 31 degrees at 88 cents.

Column 1—Effective September 29, The Texas Co. in Oklahoma, Stanolind Crude Oil Purchasing Co. in Kansas and Oklahoma; Anderson & Prichard, Inc., in Oklahoma; Bell Oil & Gas Co. in Oklahoma; Carter Oil Co. in Oklahoma and Kansas; Deep Rock Oil Co. in Oklahoma; Derby Oil Co. in Kansas; Globe Refining Co. in Oklahoma; Golden Rule Refining Co. in Kansas; Gypsy Oil Co. in Oklahoma and Kansas; Kanotex Refining Co. in Kansas; Magnolia Petroleum Co. in Oklahoma; Mid-Continent Petroleum Corp. in Oklahoma; National Refining Co. in Kansas and Oklahoma; Shell Petroleum Corp. in Kansas and Oklahoma; Sinclair Prairie Oil Marketing Co. in Kansas and Oklahoma; The Texas Co. in Oklahoma; Tide Water Oil Co. in Oklahoma; Vickers Refining Co. in Kansas; Continental Oil Co. in Kansas and Oklahoma; Empire Pipe Line Co. in Oklahoma and Kansas; Phillex Oil Co. in Kansas and Oklahoma; Pure Oil Co. in Oklahoma; Skelly Oil Co. in Kansas. Effective September 29, by White Eagle Oil Corp. in Kansas; on October 1 by Barnsdall Refineries, Inc., in Oklahoma.

Column 2—Effective September 29, by the Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Sinclair Prairie Oil Marketing Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Bell Oil & Gas Co., Continental Oil Co. Effective September 29 in the Van Pool, Van Zandt County, the Pure Oil Co. posted below 29 degrees, 84 cents, with 2 cents added for each degree up to 40 and over at $1.08.

Column 3—Effective September 29 by the Texas Co., Magnolia Petroleum Co., Gulf Refining Co. Effective September 29, Stanolind Oil & Gas Co. in Pine Island, Louisiana, and Marion County, Texas, posted below 38 degrees, 63 cents, with 2 cents added for each degree up to 40 and over at 95 cents. For Standard Oil Co. of Louisiana's prices see Columns 10 to 16, inclusive.

Column 4—Effective September 29 by the Texas Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Sinclair Prairie Oil Marketing Co. and H. F. Wilcox Oil & Gas Co. On same day Phillex Oil Co. posted below 31 degrees, 71 cents, with 2 cents added for each degree up to 40 and over at 91 cents.

Column 5—Effective September 29 by the Texas Co., Humble Oil & Refining Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Wilcox Oil & Gas Co., Continental Oil Co. On same day, Phillex Oil Co. posted below 31 degrees, 61 cents, with 2 cents added for each degree upward to 40 and over at 81 cents.

Column 6—Effective September 29 by the Humble Oil & Refining Co. and Tide Water Oil Co., and on September 30 by the Texas Co. which on September 29 had posted a schedule of $1.07 to $1.12, with a 1-cent spread on each degree.

Column 7—Effective September 29 by the Stanolind Oil & Gas Co.

Column 8—Effective September 29 by the Humble Oil & Refining Co., Gulf Pipe Line Co., Shell Petroleum Corp., Pure Oil Co., Sinclair Prairie Oil Marketing Co. On October 2, Magnolia Petroleum Co. posted Lockport, Louisiana: 20-20.9 degrees, 84 cents, with 2 cents added for each degree upward to 34 and over at $1.12, and in Cameron Meadows and Iowa, Louisiana: Below 20 degrees, 72 cents, with 2 cents added for each degree up to 34 and over at $1.02. These prices were 2 cents higher on each degree than Magnolia prices posted on September 29.

Column 9—Effective September 30, the Texas Co. (On September 29, the Texas Co. had posted a schedule 2 cents lower on each degree, but changed it on September 30.)

Columns 10, 11, 12, 13, 14, 15, 16—Effective September 29, by the Standard Oil Co. of Louisiana and Louisiana Oil Refining Co.

Column 17—Effective September 29, by the Louisiana Oil Refining Co.

(California Crude Oil Prices on Page 31)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

October 3, 1933

Taxes

The gasoline quotations given in the following tables include the 1½-cent Federal tax effective June 17, 1933, as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third or competitive grade is available at 1 or more cents per gallon under the service station price for the regular grade. Ethyl Gasolines are sold 2 cents above the service station price for the regular grade.

Southern District

STANDARD OIL CO. OF KENTUCKY

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Atlanta, Ga.	22.0	22.0	7.5	12.0
Augusta	22.0	22 0	7.5	13.0
Macon	22.0	22.0	7.5	13.0
Savannah	22.0	22.0	7.5	14.0
Birm'ham, Ala.	24.0	24.0	8.5	13.0
Mobile	23.0	23.0	8.5	10.0
Montgomery	25.0	25.0	8.5	14.0
Jackson, Miss.	22.0	22.0	7.5	11.0
Vicksburg	22.0	22.0	7.5	11.0
Jack'ville, Fla.	22.0	22.0	8.5	12.5
Miami	22.0	22.0	8.5	13.5
Pensacola	20.0	20.0	8.5	13.5
Tampa	22.0	22.0	8.5	12.5
Lexington, Ky.	21.0	21.0	6.5	10.0
Covington	21.0	21.0	6.5	11.5
Louisville	20.0	20.0	6.5	10.0
Paducah	21.0	21.0	6.5	9.0

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2½ cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia and Mississippi include 1-cent state tax. In Florida, an inspection fee of 0.125 cent; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline. To Pensacola, Mobile and Birmingham state taxes on gasoline add 1-cent city tax.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Dallas, Tex.	16.5	19.5	5.5	8.5
Fort Worth	16.5	19.5	5.5	8.5
Houston	16 5	19.5	5.5	8.5
San Antonio	16.5	19.5	5.5	8.5
El Paso	16.5	19 5	5 5	8 5
Texarkana	*19.5	19.5	5.5	10.0
Muskogee	17 0	19.5	5.5	9.5
Okla. City	17.0	19.5	5.5	8.5
Tulsa	17.0	19.5	5.5	8.5
Ft. Smith Ark.	*17.9	17.9	5.5	9.0
Little Rock	*20.4	20.4	7 5	9.0

*Less 2 cents to dealers.

Standard Oil Co. (Indiana)

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Chicago	17.8	17.8	4.5	9.7
Decatur, Ill.	18.2	18.2	4.5	10.2
E. St. Louis	17.5	17.5	4.5	9.5
Joliet	18.2	18.2	4.5	10.2
Peoria	18.2	18.2	4.5	10.2
Quincy	15.8	15.8	4.5	10.0
Davenport, Ia.	18.1	18.1	4.5	10.1
Des Moines	18.1	18.1	4.5	9.0
Mason City	18.1	18.1	4.5	10.1
Sioux City	17.7	17.7	4.5	9.7
Duluth, Minn.	18.7	18.7	4.5	10.4
Mankato	18.3	18.3	4.5	10.3
Minneapolis	18.4	18.4	4.5	10.4
LaCrosse, Wis.	19.8	19.8	5.3	10 9
Green Bay	19.2	19.2	5.5	10.2
Milwaukee	18.7	18.7	5.5	9.7
Madison	18.9	18.9	5.5	9.9
Detroit, Mich.	18.0	18 0	4.5	10.5
Grand Rapids	18.2	18.2	4.5	10.2
Saginaw	18.5	18.5	4.5	10.5
Evansville, Ind.	19 0	16.0	5 5	10.0
Indianapolis	19.2	19.2	5.5	10 2
South Bend	19.5	19.5	5.5	10.5
Fargo, N. Dak.	20.1	20.1	4.5	12.1
Huron, S. Dak.	20.4	20.4	5.5	11.4
Sioux Falls	19 9	19.9	5.5	10.9
K. C., Mo.*	17.2	17.2	4.5	7.5
Springfield*	17.1	17.1	4.5	9.1
St. Louis	16.2	16.2	4.0	8.7
St. Joseph*	16.8	16 8	4.5	8.8
Wichita, Kans.	16.1	16.1	4.5	8.1
Bartlesville, Ok.	16.5	17.0	5.5	9.5

*State tax 2 cents, 1-cent city tax and 1½-cent Federal tax.

Effective June 1, 1933—Discounts off tank wagon price to consumers on 500 gallons or more per month in territory outside of Chicago metropolitan area: 2 cents on Ethyl and Red Crown gasolines, and 1 cent on Stanolind gasoline. One-half cent additional discount in Chicago division.

Effective July 1, 1933—Discounts on resellers authorized agent's agreement made off the service station price throughout the territory as follows: 2.5 cents on Red Crown Ethyl and Standard Red Crown gasolines, and 1.5 cents on Stanolind gasoline. Half of reduction from normal service station price shall be absorbed by resellers up to maximum of 1 cent on all grades.

Stanolex Furnace Oil in Chicago

Effective September 13, 1933, prices f.o.b. Chicago, tank wagon prices: No. 1 (36-40 lt. stw. zero), under 100 gallons, 8¼ cents; No. 2 (30-34 stw zero), 7¾ cents; No. 3 (22-26 zero), 7¼ cents; No. 4 under 300 gallons (12-16 zero), 6¼ cents; viscosity of No. 4, 90-115 at 100° F.; No. 5 under 300 gallons, 6 cents; for deliveries of 100 gallons or more deduct 1 cent.

Naphtha

	Tank	
	Wagon	Car
Oleum spirits	11.9	7.69
V.M.&P. naphtha	15.9	8.44
Cleaners' naphtha	15.0	8.94
Stanisol	15.0	8 19

Prices f.o.b. Chicago, September 13, 1933. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Atl'tic City, N.J.	19.2	18.7	4.5	10.0
Newark	18.5	18.0	4.5	9.5
Annapolis, Md.	19.8	19.3	5.5	10.0
Baltimore	19.3	18.8	5.5	9.0
Cumberland	20.8	20.3	5.5	12.7
Wash'g'n, D. C.	17.5	17.0	3.5	11.0
Danville, Va.	21.9	21.4	6.5	12.9
Norfolk	20.4	19.9	6.5	11.3
Petersburg	21 2	20 7	6.5	12 4
Richmond	20.8	20.3	6.5	11.7
Roanoke	22.0	21.5	6 5	12.9
Charle'n, W.Va.	20.2	19.7	5.5	12.6
Parkersburg	19.5	19.0	5.5	11.2
Wheeling	19 5	19.0	5.5	12 2
Charlotte, N. C.	23.6	23.1	7.5	13.5
Hickory	23.9	23.4	7.5	13.7
Mt. Airy	23.9	23.4	7.5	13.8
Raleigh	23 4	23.9	7.5	13.2
Salisbury	23.7	23.2	7.5	13.6
Charleston, S.C.	21.4	20.9	7.5	11.3
Columbia	23.2	22.7	7.5	13.2
Spartan'burg	23.6	23.1	7.5	13.5

Note—Dealer contracts for gasoline are written at 2½ cents over the posted tank car price. Kerosene 1 cent off tank wagon for 25 gallons or more under contract except New Jersey and Baltimore, Md.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
N. Orleans, La.	20 8	20 3	*7 5	†12.0
Baton Rouge	20 0	19 5	6.5	†12 0
Alexandria	20.9	20.4	*7.5	†12 0
Lafayette	21.1	20.6	*7 5	†12.0
Lake Charles	21 0	20 5	*7 5	†12 0
Shreveport	18 8	18.3	6 5	†12 0
Knoxville, Tenn.	24.2	23.7	8.5	12.5
Memphis	22.6	22.1	8.5	10.0
Chattanooga	23.9	23.4	8.5	10.0
Nashville	23.5	23.0	8.5	10 0
Bristol	24.1	24.6	8.5	13.0

*Includes city tax of 1 cent. †Louisiana kerosene prices include 1-cent state tax.

Effective June 2, 1933, station prices fixed at 7 cents above basic tank car price at key refining points in territory. Commercial consumers for tank wagon delivery pay following amounts over tank car price basis yearly deliveries:

1,000 to 75,000 gallons	2.5
75,000 to 300,000 gallons	1 5
Over 300,000 gallons	1.0

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline			Kero.
	Tank truck†	Posted retail	Incl'ds tax	tank wagon
San Francisco	17.5	20.5	4.5	12.5
Los Angeles	17.0	20.0	4.5	12.5
Fresno, Calif.	18.5	21.5	4.5	14.0
Phoenix, Ariz.	18 5	21.5	6.5	‡16.0
Reno, Nev.	21.0	24.0	5.5	15.5
Portland, Ore.	20.0	23.0	5.5	13.5
Seattle, Wash.	20 0	23.0	6.5	13.5
Spokane	23.0	26.0	6.5	18.0
Tacoma	20.0	23.0	6.5	13.5

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Above prices are at company's plant or depots as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent. ‡Includes 5-cent state tax.

New York and Part of New England District

STANDARD OIL CO. OF NEW YORK

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Albany, N. Y.	17.1	18.1	4.5	9.5
New York	17.0	18.0	4.5	8 5
Buffalo	17.7	18.7	4.5	9.5
Rochester	17.8	18.8	4.5	9.5
Syracuse	17.6	18.6	4.5	9.0
Boston, Mass.	17.0	18.0	4.5	8.5
Augusta, Me.	18.5	19.5	5.5	9.0
Manch'tr, N. H.	19.2	20.2	8.5	8.5
Burlington, Vt.	19.8	20.8	5.5	9.0

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Philadelphia, Pa.	16.5	17.0	4.5	10.0
Pittsburgh	17.0	18.0	4.5	10.0
Allentown	17.0	18.0	4.5	10.0
Erie	17.0	18.0	4.5	10.0
Scranton	17.0	18.0	4.5	10.0
Altoona	17.0	18.0	4 5	10.0
Dover, Del.	17.0	18.0	4.5	10.0
Wilmington	17.0	18.0	4.5	10.0
Boston, Mass.	17 0	18 0	4.5	8.5
Springfield	17.6	18 6	4 5	8 5
Worcester	17.5	18.5	4.5	8 5
Hartford, Conn.	16 4	17 4	3.5	8.5
New Haven	16 2	17.2	3 5	8 5
Providence, R.I.	16.0	17.0	3.5	8.5

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Denver, Colo.	19.0	21.5	5.5	12.5
Pueblo	19 0	21 5	5 5	13 0
Grand Juctn.	21 0	23.5	5.5	15.0
Casper, Wyo.	19.5	32.0	5.5	11.0
Cheyenne	18.0	20.5	5.5	13.0
Butte, Mont.	21 0	23 5	5 6	17 5
Billings	23.0	25.5	6.5	16.5
Helena	24.0	26.5	6 5	17 5
Great Falls	24.0	26 5	6 5	17 5
Salt Lake, Utah	22 0	24.5	6.5	16.0
Boise, Idaho	24 0	26 5	6.5	18.0
Twin Falls	24 0	26 5	6 5	18.0
Albu'que, N. M.	19.5	22.5	*7.5	13.0

*One-cent city tax.

Effective June 1, 1933, dealers and lease and license accounts will receive 2½ cents discount on regular gasoline in Montana, Colorado, Wyoming, Utah and Idaho.

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Ohio points	17.0	18.0	5.5	*12.5

*Includes state tax of 1 cent, effective July 22.

Canada*

IMPERIAL OIL, LTD.
Imperial 3-Star Gasoline

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Hamilton, Ont.†	26.5	27 5	6 0	17 5
Toronto, Ont.†	26 5	27.5	6.0	17.5
Brandon, Man.*	31 0	34 5	7.0	22 5
Winnipeg, Man.	28.0	31.5	7 0	19.5
Regina, Sask.	31 0	35 0	6.0	23.5
Saskatoon, Sask.	32.0	37.0	6 0	25 5
Edmonton, Alta.	31 5	35.5	6 0	24 5
Calgary, Alta.	28.0	32 0	6.0	21.0
Vanc'ver, B. C.†	30.0	34.5	6 0	24 0
Montreal, Que.	24 0	27 0	6.0	17.0
St. Johns, N. B.	26 5	30 5	7.0	22.5
Halifax, N. S.	25.5	29.5	7.0	22.5

*Imperial gallon used in Canada. †Dealer discount posted tank wagon on gasoline in Ontario and British Columbia subject to dealer's discount of 2 cents per gallon.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline			Kero.
	Tank wagon	Service station	Incl'ds tax	tank wagon
Omaha	18.8	19.8	5.5	10.8
McCook	17 5	17 5	5 5	10.0
Norfolk	19.3	20 3	6 5	11.3
N. Platte	20.3	21 3	5.5	10.5
Scottsbluff	18.8	18.8	5.5	11.0

Note: Discount to dealers and AAA commissions. From service station price: Red Crown Ethyl and Standard Red Crown gasoline, 3 cents. Reliance (third grade) gasoline, 2 cents. Rentals under lease and agents agreement, one-half cent per gallon additional.

Discount to consumers under contracts (large consumers under contracts and governmental units): On tank wagon deliveries of gasoline on monthly purchases of 500 gallons, or yearly purchases of 6,000 gallons, from the service station price: Red Crown Ethyl and Standard Red Crown Gasoline, 2 cents per gallon; Reliance (third brand) gasoline, 1 cent per gallon.

TANK WAGON CHANGES

(Regular-Grade Gasoline and Kerosene)

The Standard Oil Co. of New Jersey September 16 reduced the tank wagon and service station prices on gasoline seven-tenths of a cent in Wheeling, W. Va. September 20 it advanced the tank wagon price of kerosene in Petersburg, Va., seven-tenths of a cent. In Roanoke, Va., instead of there having been an advance of 1 cent in the tank wagon price of kerosene, as previously announced, the price was advanced nine-tenths of a cent September 13 and 1 cent September 20.

The Standard Oil Co. of Louisiana September 18 advanced the tank wagon price of kerosene 1 cent throughout Louisiana except in New Orleans, where the price was advanced 2 cents. On September 15 the city tax of 1 cent on kerosene in New Orleans was discontinued.

The Standard Oil Co. (Indiana) September 29 reduced the service station price of gasoline 1½ cents in Evansville.

The Magnolia Petroleum Co., October 2, reduced the tank wagon and service station price of gasoline one-half cent in San Antonio.

CRUDE OIL PRICE CHANGES

Crude price changes of September 29 and later are given on Page 31.

NRA Wins Suit Started By East Texas Refiners

TYLER, Tex., Oct. 3.—The Panama Refining Co. lost its suit attacking Federal regulation under the National Recovery Act today when Randolph Bryant, Federal judge, denied an application for an injunction against the action of Department of the Interior agents in requiring reports on oil received, refined and shipped.

Judge Bryant based his decision on the same factor which caused another refining company to lose in the District of Columbia Supreme Court several weeks ago—the presumption of validity of acts of constituted authorities.

The court said that while at the outset and even now it had the "gravest misgivings" regarding the constitutionality of the recovery legislation as applied to the refining business, it realized from a "more or less intimate connection" with parallel cases that Congress had full and plenary powers over interstate commerce, that the Supreme Court had extended this power into many lines of commerce and industry and that the presumption of the validity of acts of the Interior Department agents compelled him to deny the application.

J. Howard Marshall, assistant United States attorney-general, late in the day reiterated the argument of Charles Fahy, of the Interior Department, earlier in the day. Marshall, A. D. Ryan, chief investigator for the department, and S. D. Bennett, United States attorney at Beaumont, were defendants.

Marshall sought to show that Congress felt it necessary to check shipments of refined oil as one outlet of illegally produced oil which was demoralizing the market over all the country.

J. H. JENKINS DIES

J. H. Jenkins, 61, dean of the Magnolia Institute, educational division of the Magnolia Petroleum Co. sales department, Dallas, Tex., and for many years connected with the marketing department of that company, died at his home in that city on September 26.

JOHN W. SMITH DIES

John W. Smith, district superintendent for Sinclair Prairie Oil Co. at Independence, Kans., having charge of north Oklahoma and southern Kansas districts, died at Mercy Hospital, Independence, last week.

NEWS FOR SALES DEPARTMENTS

New Oil Marketing Problems Will Get Study at Meetings

Problems of merchandising the products of petroleum under the code of fair competition for the petroleum industry will engage much of the time of the Division of Marketing of the American Petroleum Institute in committee meetings to be held during the fourteenth annual meeting of the Institute in Chicago beginning October 23. Maximum terms of credit, which has been a subject of intensive study since the committee on credit practices was organized several months ago, will be considered in sessions called by Chairman M. L. Gosney, Sinclair Refining Co., to begin Monday morning, October 23, at 9 o'clock. Secretary J. A. McNally has notified members that they should come prepared to discuss the standardization of maximum credit terms applicable to the sale of petroleum products not mentioned in Appendix B of the code, and specifically to discuss terms which should be applied to the sale of so-called specialty products.

Proposals for changes in the credit phases of the petroleum code recently have been presented to the marketing committee of the Planning and Co-ordinating Committee of the industry in Washington, and a report will be made for the committee that made the representations. Chairman Gosney headed the committee and was accompanied to Washington by W. N. Watson, Socony-Vacuum, New York; H. R. Wakefield, Sun Oil Co., Philadelphia; F. H. Bowman, Pure Oil Co., Chicago, and W. C. Wenzel, Richfield Oil Corp., New York. It is likely that the committee will hold adjourned sessions during the week.

The committee on marketing equipment has been called by Chairman H. C. Meyer to meet at 10 o'clock Monday morning, and among the subjects to be discussed are recent rulings of the dealers in New Jersey and Ohio.

The nominating committee to propose 20 elective members of the general marketing committee will meet at 4:30 o'clock Wednesday afternoon, October 25. The principal session of the general marketing committee for discussion of general problems will be held Tuesday evening, October 24.

MUST LABEL RECLAIMED OIL

LOS ANGELES, Calif., Oct. 2.—The validity of a statute requiring the proper labeling of lubricating oil which has been used and reclaimed is upheld by the Superior Court, in a ruling, the public is entitled to know the character of oil offered for sale, even though the product may not be inferior in quality. The decision was given in complaints filed by a group of oil men against J. S. Casey, chief of the division of weights and measures of the agricultural department, in which they asserted that compliance with the law would harm oil sales because an impression would be created that the oil was of secondary quality.

CITIES GET SHARE OF TAXES

LOS ANGELES, Calif., Oct. 2.—Los Angeles County's share of gasoline taxes for the fiscal year 1932-1933 amounted to $4,811,940, with an additional $1,204,406 revenue from motor vehicle licenses. Of the total, $2,765,707 was allocated by the supervisors to the City of Los Angeles; Alhambra, $95,310; Beverly Hills, $31,657; Culver City, $19,176; El Monte, $4,891; Glendale, $122,624.

Increased Shipments From West to East Cause Sharp Rise in Tanker Rates

NEW YORK, Oct. 2.—The increasing movement of crude oil from California and the Gulf Coast ports to the Atlantic Seaboard is reported to have brought about a sharp recovery in the charter rates for oil tankers. Coastwise and intercoastal shipments are confined by law to American vessels, and the present activity also has diverted many American tankers into these runs.

About 25 tankers flying the United States flag with aggregate carrying capacity of approximately 1,875,000 bbls., it is stated, have been withdrawn from lay-up this year. It is expected that additional tankers will be placed back in commission soon. On January 1, 75 of these vessels were tied up. Fifteen or 20 of them are so obsolete it is doubted they will return to service except in an emergency.

Charter rates for tankers to move gasoline and other refined oil from Gulf Coast ports to New York, Philadelphia, Bayonne, Baltimore and New England ports have risen from approximately 14 cents a barrel to 20 cents for October loading. It is reported that some tankers have been chartered for a full year's operation at 21 cents a barrel.

In the intercoastal run few tankers have been chartered, as most of this movement is handled by the oil companies themselves. This business is mostly between the major companies, all of whom have large fleets. Recently the Standard Oil Co. of New Jersey purchased 5,000,000 bbls. of bunker fuel oil from the Standard Oil Co. of California for movement to the Atlantic Seaboard. As a result, a heavy intercoastal movement of fuel oil is expected for the next few months.

Because of the diversion of American tankers to coastwise and intercoastal trade, there has been some increase in chartering by American oil companies of foreign-flag tankers to move their export shipments. This has resulted in slightly higher rates. Recent charters of tankers to move gasoline from Gulf Coast to British ports have been made at 8s 9d a ton, against a former rate of 8s. Charter rates on the movement of crude oil in the same run have risen from 7s 6d to 8s a ton.

Highway Users Protesting Against Diversion of Tax

WASHINGTON, D. C., Oct. 2.—The national highway users' conference asserts in a letter to President Roosevelt that Harry L. Hopkins, emergency relief administrator, is encouraging diversion of state highway funds in such a way that they would be spent on bread lines instead of wages to workers. The letter was made public by the conference's advisory committee, of which Alfred P. Sloan, Jr., president of General Motors Corp., is president, and was concurred in by officials of the American Petroleum Institute, National Grange, Portland Cement Association, American Automobile Association, Associated General Contractors of America and other organizations interested directly or indirectly in highways.

The letter accuses Hopkins of having encouraged states to use gasoline tax revenues, originally levied for highways, for emergency relief in order to receive Federal funds for the same purpose. As a result of Hopkins' suggestion, it was asserted, an attempt was made to divert 2 cents of the gasoline tax in Kentucky in order to provide $3,000,000 needed to match a proposed Federal contribution of $8,000,000 for relief.

"It is obvious," the highway conference says, "that the effect of this proposal in Kentucky would have been to take the $3,000,000 needed for emergency relief away from the funds available for highway employment, thereby increasing the ranks of the unemployed to be fed and clothed by the Federal Government."

MAKING A FEW COMPARISONS

While gasoline supplied 14.31 per cent of the Government's revenue in the year ending June 30, 1933, telephone and telegraph taxes provided only 1.67 per cent, estates, 3.40 per cent, electricity 3.27 per cent, theater admissions 1.78 per cent, checks 4.40 per cent, and stamp taxes, levied upon documents, playing cards, etc., 6.57 per cent. The taxes on tobacco produced income representing 46.13 per cent.

President's Proclamation May Remove Gasoline Tax

WASHINGTON, D. C., Oct. 2.—Chairman Harrison, of the Senate Finance Committee, says Federal revenues from other sources have increased so much it may be possible to eliminate Federal gasoline taxes by presidential proclamation. Gross gasoline taxes levied by states in the first six months of 1933 totaled $259,336,280, or $8,574,040 less than the $267,910,320 gross in the first half of 1932. Tennessee has instructed inspectors to "scrutinize" all stocks of kerosene stored in the State "to the end that the unlawful practice of blending kerosene with gasoline may be minimized."

Motor vehicle registrations in all but 12 states on July 1, 1933, was 15,535,928 against 16,369,463 on July 1, 1932, a decline of 833,535 vehicles, or 5.1 per cent. Retail gasoline prices in 50 cities on September 1 averaged 13.24 cents against 19.16 cents on September 1, 1923. The tax was 5.68 cents against 1.19 cents in 1923, and the retail cost to the consumer 18.92 cents a gallon against 20.36 cents.

RUSSIA TURNING AWAY TRADE

Russia, it is reported, is finding it difficult to take care of many of its large European gasoline customers and this state of affairs is held largely responsible for the sudden appearance of French buyers in the American markets.

IDAHO BUYING FROM ITSELF

BOISE, Idaho, Oct. 2.—Governor Ross has ordered all state departments under his direction to buy their gasoline and oil from state distributing agencies instead of private dealers under a plan which he expects to save $1,000 a month.

NAVY DEPARTMENT ASKS BIDS

WASHINGTON, D. C., Oct. 2.—The Navy Department has invited bids for furnishing 300,000 bbls. of petroleum residuum, delivery at Mare Island, California. Bids will be opened in this city October 10 at 10 o'clock a.m.

Propose Bartering Canadian Beef for Petroleum Products

OTTAWA, Ontario, Oct. 2.—A proposal to barter the beef from 100,000 Canadian cattle for Russian petroleum products has been submitted to the federal government here by G. G. Serkau of Winnipeg. The proposed deal, under negotiation for several months, is a modification of a proposal urged by Mr. Serkau last year which involved the exchange of Canadian cattle for Russian oil and anthracite. The latter proposal was turned down by the Canadian government owing to the fact that it involved a guarantee by the Dominion.

The present scheme, it is stated, involves no guarantee. Owing to the lateness of the season, beef would be shipped to Russia instead of cattle, in exchange for refined petroleum products instead of crude oil. The question of a further exchange involving breeding cattle will be taken up in 1934. No decision has been announced by the Ottawa authorities.

Gasoline Tax Revenue Is Lower Than That of 1932

Gross revenue from state gasoline taxes in the first six months of 1933 amounted to $259,336,280, or $8,574,040 less than the $267,910,320 gross of the first half of 1932, it is estimated by the American petroleum industries committee.

Taxed gallonage declined 4 per cent and gross revenues 3 per cent, the committee finds, gross collections for the first half indicating that gross revenue for the full year will be approximately $520,000,000, or only $7,000,000 above the net revenue of $513,047,239 in 1932. With a normal shrinkage of more than $25,000,000 between gross and net, due to deductions for exemptions and refunds paid on gasoline consumed in nonhighway using machines, total net State gasoline tax revenues for 1933 may fall below $500,000,000 for the first time since 1930 even though tax rates are higher.

Neither the gross $259,336,280 collections, nor the net figures, which probably will be made public shortly by the U. S. Bureau of Public Roads, represent the total of special additional taxes paid by motorists in the first half of 1932, the committee points out.

The Federal gasoline tax of 1 cent per gallon cost $66,546,645, according to official governments reports. Federal taxes on lubricating oil added approximately $8,000,000, and Federal taxes on cars, trucks, parts, accessories, tires, etc., increased the bill by $16,000,000.

Without taking into account the various other taxes on motor vehicles and fuel — state, county and city — the six months' motor tax bill amounts to $349,882,925, plus $150,000,000, or more, in registration fees. The full year's motor tax bill thus may be estimated at above $1,000,000,000.

The gasoline tax estimates of the committee are based upon taxed gallonage reported by the states to American Petroleum Institute's department of statistics.

MARKETING BODY REORGANIZED

CALGARY, Alberta, Oct. 2.—Federated Oil Consumers, Ltd., of Calgary, formed early this year as a co-operative project for marketing petroleum products in Alberta, has been reorganized. A majority of the directors, including Harold J. Maloney, chairman, have retired. The new board consists of A. Shelton and George Fagon.

NEWS FOR PETROLEUM REFINERS

Court Awards Injunction to East Texas Refineries

LONGVIEW, Tex., Oct. 2.—An interlocutory decree enjoining the Texas Railroad Commission from forcing refiners to make reports of their operations and transportation of crude oil has been granted by Judge J. C. Hutcheson, Jr., and Judge W. I. Grubbs. The writ, asked by 28 East Texas refiners, enjoins all agents and employes of the commission from seeking to compel the plaintiffs to make reports of crude oil received, purchased or delivered. It enjoins the commission representatives from attempting to examine the books and records of the companies named in the injunction. It was ruled that the injunction shall continue in force pending final orders and subject to further orders of the Federal Court.

In making the ruling, however, the judges made it clear they did not intend to impair the right of the commission and the attorney general and other officers to enforce the statutes which prohibit the purchase, transportation or handling of crude oil produced in violation of the law. They also said the plaintiffs must continue to furnish approved tenders before any oil is accepted for purchase. Further, the decree gives the attorney general's staff the right to examine the books and records of the plaintiffs.

NEW LOADING RACK FOR PURE

MOUNT PLEASANT, Mich., Oct. 2. A 20-car loading rack for shipment of between 4,000 and 5,000 bbls. of crude daily from Delwin, on the Pere Marquette Railroad, north of Mount Pleasant, is to be constructed by the Pure Oil Pipe Line Co., according to David Beach, superintendent. The present loading rack and storage tanks at Mount Pleasant will be moved to Delwin. Only minor changes in pipe lines are necessary. Pure recently purchased the pipe line system formerly operated by the Producers Pipe Line Co., subsidiary of the Old Dutch Refining Co.

MAKES ITS FIRST CRUDE RUN

SHREVEPORT, La., Oct. 2.—Mississippi's first oil refinery made its first commercial run of crude September 23. It is the Dixie Oil & Refining Co.'s plant at Jackson. The plant, with a daily crude capacity of 1,500 bbls., is owned by Ed Condon, of Jackson, president; Charles Wright, secretary-treasurer, and general manager, and associates. W. F. Mitchell is plant superintendent. As what little crude is produced in the Jackson district is not available for gasoline without cracking and the plant has no cracking equipment, it is operating on East Texas crude shipped in tank cars. The owners say they plan to install a cracking still.

SKIMMING PLANT COMPLETED

SHREVEPORT, La., Oct. 2.—An 800-bbl. crude capacity skimming plant has been completed on the edge of Converse townsite in Sabine Parish, to run crude from that field. Known as the Pelican refinery, it is owned by A. J. Allen, A. R. Chestnut and T. J. Youngblood, of Mineral Wells, Tex., formerly interested in the East Texas Field. They have contracted for 200 bbls. of crude a day, according to reports but will add to this as occasion demands. Daily average runs from Converse's 15 wells for the last few weeks have been 360 to 370 bbls.

Special Pleas Filed Ask the Dismissal of Penalty and Ouster Suit in Texas

AUSTIN, Tex., Oct. 2.—Two special pleas filed in behalf of a defendant in the State's $17,500,000 penalty and ouster suit against oil companies scheduled to go to trial tomorrow, declare that President Roosevelt's code for the petroleum industry is in effect the same as the Federal Trade Commission code complained of by the State and therefore the suit should be dismissed. The pleas were filed in the Ninety-eighth District Court by John Hancock of Fort Worth, executive vice president and general counsel of the Texas Pacific Coal & Oil Co.

The pleas are unusually brief. One sets forth that the State in its petition has attempted to raise an issue of fact as to whether the initiation of a code of ethics and the alleged adherence of defendants to the code as adopted by the Federal Trade Commission, constitutes violation of the antitrust laws of Texas; that subsequent to the doing of things alleged in the State's petition, Congress passed the National Industrial Recovery Act, under which the President promulgated a code for the oil industry "in effect, the same as the code approved and promulgated by the Federal Trade Commission;" that in issuing his code the President decreed that it provided for fair and legal practices by the oil industry and that, therefore, the issue of fact, raised by the State's petition as to the fairness and legality of the Federal Trade Commission code has been foreclosed.

The other plea recites that the State has alleged that defendants in the antitrust case entered into a conspiracy in violation of the Texas antitrust laws in an effort to have a code of ethics for the petroleum industry adopted by the Federal Trade Commission and by submitting such a code to the commission and afterward subscribing to it, did violate the state laws; that since the doing of things alleged in the State's petition, Congress has passed the Recovery Act and the President has issued a code in effect the same as the Federal Trade Commission code. It then concludes as follows:

"If, as alleged by plaintiff, the said code of ethics adopted and promulgated by the Federal Trade Commission and subscribed to by this defendant and others is in violation of the antitrust and antimonopoly statutes of the State of Texas, the said act of Congress of the United States in enacting the said National Industrial Recovery Act, and the 'code of fair competition for the petroleum industry' approved, decreed and promulgated by the President of the United States under and by virtue of the said act of the Congress of the United States abrogates, suspends and repeals the antitrust and antimonopoly statutes of the State of Texas in so far as the acts, things and conduct of this defendant and others, complained of in plaintiff's petition."

Similar pleas have been included in amended answers filed by all defendants in the antitrust suit, the answers declaring that the President's code required oil companies to do the very things for which the State is seeking penalties in its suit.

PETROLEUM CHEMISTS MEET

The petroleum group of the Oklahoma section of the American Chemical Society held the first meeting of the 1933-34 session in Bartlesville on September 30. Following an inspection of the Barnsdall refinery, the group assembled in the Barnsdall office building to hear papers on "Pyrolysis of Saturated Hydrocarbons," by F. E. Frey, and "Chlorinated Paraffin," by F. T. Gardner. Dinner and entertainment in the Barnsdall clubhouse followed.

MERKEL PLANT RECONDITIONED

The New Deal Oil & Refining Co. of Abilene, Tex., owned by Anderson Brothers of Merkel, has reconditioned its plant formerly operated under the name of Radford & Guitar, and the new capacity will be 750 bbls. per day. The old capacity was 1,500 bbls.

REFINERY FOR CHURCHILL

CHATHAM, Ontario, Oct. 2.—Officials of the On-to-the-Bay Association at Winnipeg, Manitoba, have announced that the company's program includes the early establishment of an oil refinery at Churchill, on Hudson's Bay. It is planned to import crude by the Hudson's Bay route.

NEW BUILDING FOR IMPERIAL

EDMONTON, Alberta, Oct. 2.—Imperial Oil, Ltd., has bought the property at 102nd Street and 100th Avenue and will convert the building into offices, primarily for the use of the company. The property cost approximately $25,000 and about $7,500 will be spent in alterations. The company's Edmonton offices have been in the McLeod Building for the past 10 years.

Says Nature Installed First Cracking Plant

The best explanation of how nature makes oil, long a puzzle to scientists, is that processes much like those in man-made refineries are utilized, said Wallace E. Pratt, of the Humble Oil & Refining Co., Houston, before the International Geological Congress in Washington recently. The hydrogenation and cracking processes of refineries are used by nature to refine petroleum out of the remains of tiny animals and plants that were deposited ages ago in mud near the shores of shallow ancient seas.

Heat and pressure of the earth's crust split the molecules or atom bundles of the oil, which is the cracking process, converting it into gas and heavy liquids. These work their way into sand beds underground, and then begins the hydrogenation process by which the oil is impregnated with hydrogen. The hydrogen may come from deep inside the earth or from methane gas generated in the original cracking stage. Heat and pressure also aid in this process, although it may take much longer than in man-made refineries because there is less heat available.

Building of Pan American Plant Employs 1,500 Men

The equipment of the refinery under construction by the Pan American Refining Corp. in Texas City, Tex., will include a combination crude and cracking unit being built by the M. W. Kellogg Co., a distillation unit for rerun purposes, a gasoline and refined oil treating plant, power station, tankage, dock facilities, pump house, shops and other buildings.

The construction of this equipment will require the services of about 1,500 men until the plant is ready for operation. Most of these men are already at work, the construction program being well under way. It is expected that the plant will be in operating condition in May, 1934, and at that time will employ an operating force of approximately 250 men.

The so-called Vacuum tank farm adjacent to the refinery site was purchased recently for use in connection with the refinery.

Canning Department Being Added to Sinclair's Plant

HOUSTON, Tex., Oct. 2.—The Sinclair Refining Co. has under construction at its plant on the Houston Ship Canal an oil-canning annex designed to supply the needs of the company's service stations throughout the South and Southwest and part of the Middle West territory. The first unit will be a two-story sheet-iron building 40 feet wide by 100 feet long with a 250-foot conveyor enclosure from the plant to shipside.

Machinery has been installed for filling, capping and packing of the cans into pasteboard cartons and sealing the cartons. Plans are to supply the Carolinas, Georgia and Florida by water from the Houston plant, while other southern states, midwest and southwestern territory will be served by rail.

Erection of the oil canning plant is in line with the company's announced plan of making war on "oil bootleggers."

NINETEEN PLANTS SHUT DOWN

Nineteen refineries are reported shut down in the East Texas Field. Three new plants recently began operations, the 650-bbl. plant of LaParen Refining Co. on the Roger Lacy fee land north of Kilgore; the Lotus Refining Co.'s 300-bbl. plant at Gladewater and the Goodson Refining Co.'s 300-bbl. plant west of Gladewater. The Comet Refining Co.'s 400-bbl. plant is now operating under the name of the Jack Refining Co. It is in Gladewater. The Reese Refining Corp. has been changed to the Trio Refining Co.

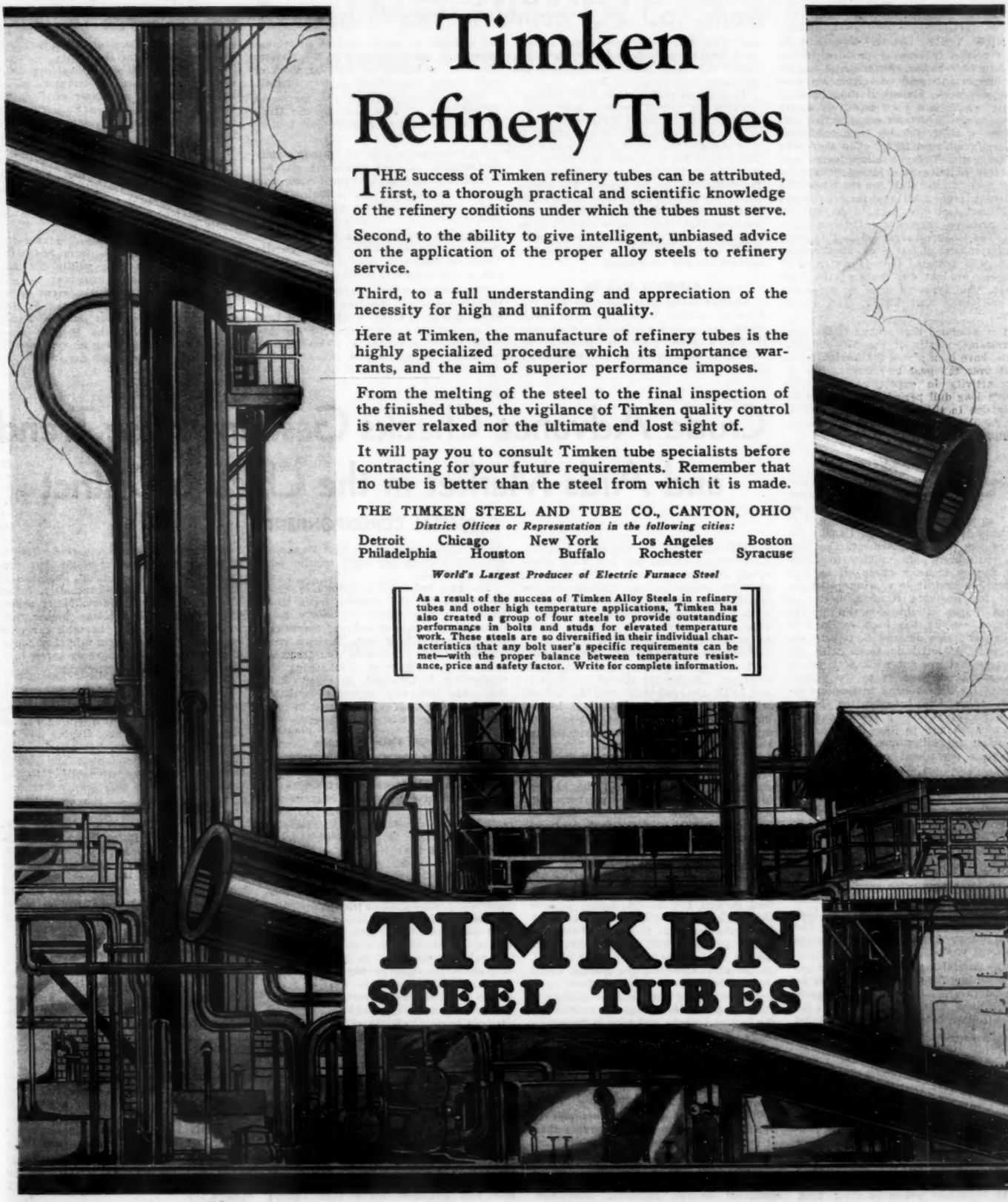
OPERATING AFTER SHUTDOWN

BILLINGS, Mont., Oct. 2.—The plant of the Independent Oil & Refining Co. in Laurel has resumed operation following a shutdown of two weeks to make changes in machinery for the better handling of northern Wyoming crudes and manufacture of winter grades of gasoline. During the winter, the plant will specialize on fuel oil and coke.

THREE KILLED IN EXPLOSION

WICHITA FALLS, Tex., Oct. 2.—R. A. Finley, Clyde Holland and Ralph Spettell, all of this city, were killed in an explosion and fire at the Taxman Refining Co. plant in this city on September 28. The failure of a tower in the cracking plant is said to have caused the explosion and fire.

Specialization Spells Success *in* Timken Refinery Tubes



THE success of Timken refinery tubes can be attributed, first, to a thorough practical and scientific knowledge of the refinery conditions under which the tubes must serve.

Second, to the ability to give intelligent, unbiased advice on the application of the proper alloy steels to refinery service.

Third, to a full understanding and appreciation of the necessity for high and uniform quality.

Here at Timken, the manufacture of refinery tubes is the highly specialized procedure which its importance warrants, and the aim of superior performance imposes.

From the melting of the steel to the final inspection of the finished tubes, the vigilance of Timken quality control is never relaxed nor the ultimate end lost sight of.

It will pay you to consult Timken tube specialists before contracting for your future requirements. Remember that no tube is better than the steel from which it is made.

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As a result of the success of Timken Alloy Steels in refinery tubes and other high temperature applications, Timken has also created a group of four steels to provide outstanding performance in bolts and studs for elevated temperature work. These steels are so diversified in their individual characteristics that any bolt user's specific requirements can be met—with the proper balance between temperature resistance, price and safety factor. Write for complete information.

TIMKEN STEEL TUBES

Renewed Activity in the Export Market Bolsters Atlantic Coast Refined Oil Price Structure

By C. O. WILLSON
New York Bureau, The Oil and Gas Journal

NEW YORK, Oct. 2.—The local export market in refinery products continued to overshadow the domestic market for important price developments over the past week. Export trading in gasolines, which has been relatively heavy since early September, was active and prices on all grades are from one-eighth to one-fourth cent higher than they were a week ago. Today a mixed cargo was reported to have been placed at a price of 6 cents at the Gulf for the 64-66 375 endpoint grade. All the major refiners and marketers are said to be quoting this price on cargoes for October delivery. These sellers advanced to this price the latter part of last week. In the same cargo it is reported that 41 water white kerosene brought 4⅜ cents at the Gulf Coast. This kerosene price is one-eighth to one-fourth cent higher than recent sales.

It is estimated that around 60,000 tons of gasoline, mostly of the 375 endpoint grade, have been placed for foreign movement over the past two weeks. The recent activity in export gasoline sales after a long dull period is said to be entirely due to the limited material available from Russian and Rumanian sources of supplies.

Less Russian Gasoline

The Russian output of gasoline apparently has dropped off and cargo movement from Russian ports has been delayed so that buyers have been forced to purchase American material. Usually the buyers seek prompt movement. The Russian curtailment of supplies to European buyers includes crude oil as well as gasoline and if it continues the demand for products from refineries in United States will broaden. So far the increased activity has been confined to gasoline and this demand largely to the one grade. Majority in touch with the export market are not willing as yet to make any predictions as to the permanency of the improvement in gasoline demand which has brought the higher prices. So far as known there has been no major change in the Russian and Rumanian oil situations which would point to a permanent reduction in the quantity of refined oils supplied by these countries to the world's oil markets. Local observers do not place much weight on the depreciated value of the American dollar in bringing purchases to this country for export movement.

Wax Price Advances

Wax was the other refinery product to show an important price advance during the week. Prices on all grades of wax for export and domestic movement have been advanced one-half cent per pound. The demand for most grades has been active for several weeks.

In the coastal market, fuel oil and gas oil are strong. The trade would not be surprised to see advances in both products this week. The higher quotations for crude oil posted last week are pointed to as well as the limited supplies at East Coast and Gulf coastal refineries as justifying higher prices for bunker fuel and gas oil. The gas oil market has been particularly strong over the past week.

Following an active period the furnace oil buying is less active. Many large distributors have covered their fall requirements and the first rush of consumer purchasers for the burning oil season is over. Bulk prices on the light grades range from 4½ to 5½ cents per gallon and the consumer prices in New York and New England grades range from 7 to 8 cents, depending on grade. It is expected that these prices will continue for the immediate future at least.

In the lubricating oil end the expected advance in steam refined and bright stock prices for export movement in barrels was not supported by all sellers. It was thought that these prices would advance from 1½ to 2 cents per gallon due in part to the higher prices charged by the manufacturers for barrels. The higher prices for barrels have been made effective by several manufacturers and it is assumed that these higher costs will be reflected in refinery prices for cylinder stocks in the near future. Quotations on neutral oils are unchanged.

California Fuel Oil

Another factor that has come into the Eastern market within the past week which has caused considerable discussion is the announcement by interests in California that much of the heavy fuel oil and gas oil stocks carried in storage there will be transported to the Eastern Seaboard refineries as cracking stock or will replace some of the eastern fuel oil.

The announcement of the movement of this fuel oil was made by the Bank of America at Los Angeles and follows in part:

"A storage supply of approximately 100,000,000 bbls. of California gas oil, Diesel, fuel and heavy oils, 77 per cent of the national storage, is beginning to move into the markets of the United States.

"This reserve, stored in California for years, constituted a threat to the Pacific Coast oil industry. Now it forms in effect a new source of national oil supply.

"This fundamental change is ascribed to the new code, limiting importations and imposing a tariff of 21 cents a barrel on foreign oils. Concerns on the Atlantic Coast, it is stated, which formerly used Venezuelan and other foreign oils are drawing now upon the long troublesome surplus of California.

"In line with the beneficial new influences, one eastern distributor is announced as the purchaser of 5,000,000 bbls. of fuel oil from a California producer. This total represents a volume larger than all of the fuel, gas and Diesel oil moved from California to the Atlantic Coast within the last two years. It is estimated moreover that California within the next six months will be called upon to supply between 7,000,000 and 10,000,000 bbls. of fuel oils to the Atlantic Seaboard.

"Through the sale of oil inventories, California will receive from $6,000,000 to $8,000,000 in cash within the next six months. This return may be substantially increased in the event of increases in bunker prices on the Atlantic and expected increases on the Pacific Coast. Statistically, the Pacific Coast, it is added, is producing no real surplus of fuel oils over current demands."

Crude Advance Checks Gasoline Price Trend and Aids Market in the Chicago District

By SPECIAL CORRESPONDENT

CHICAGO, Oct. 2.—The crude oil price advances announced late last week effectively checked the retreat of tank car gasoline prices in the Chicago region which began 10 days or two weeks earlier with a slight easing and gained momentum until it threatened security of the oil price structure generally.

Feeling was better as the week started, with market conditions steadier and with offerings considerably abated in comparison with the pell-mell rush to unload which had characterized dealings in the days immediately preceding. While refinery gasoline could not be termed strong, the tone showed improvement.

The trade here was waiting for a possible advance in tank wagon and service station prices in line with the 11-cent Mid-Continent crude price mark-up, but it appeared slow in arriving. The still unsettled condition of the tank car market was believed to be the primary reason.

Less Gasoline on Track

Much interest continued to attach to the question of gasoline on private sidings in and around St. Louis, Kansas City, Chicago, Little Rock and elsewhere. Best information at this time is that the larger part of this material has been worked out. While some is still offered, its potential effect on the market would seem to be much less than earlier.

Another phase causing some concern is gasoline put into storage by refiners in the last two weeks and held in their own tanks. Failure of jobbers to take out much gasoline lately has made this gasoline something of a problem for some refiners. This is more especially true because of the necessity for meeting the mounting crude costs. Weather in the middle states has been less favorable to consumption in the last two weeks than at any time since early summer. Jobbers appear to have had ample gasoline by September 10 and have bought little in the open market since that time. With consumer demand restricted somewhat, their contract orders have kept them well supplied, leaving few open market purchases necessary.

The new reduction in allowable crude production for the country leads trade leaders in this region to believe some definite limitations on refinery operations may be forthcoming soon. In such case, assuming crude prices hold, and assuming that the gasoline now overhanging the market can be absorbed, improved conditions are generally expected, probably carrying with them reinforcement of tank wagon and service station prices.

World's Fair Influence

Influence of the Century of Progress Exposition continues to make itself felt on consumption in the Greater Chicago region and in the territory surrounding it for 100 or 200 miles. This probably will remain a factor until the close of the World's Fair at the end of October. This is another angle which it is hoped will aid in stabilizing market conditions this month.

Retail gasoline price cutting has spread moderately with tank car price softening in the last few days. Major marketing area structures are intact, but instances of scattered sniping in Chicago and some other large cities and in the farm belt of Kansas, Iowa and nearby sections have increased. While this has worried many in the trade who had expected early ironing out of marketing troubles, the general attitude is that it is too early in the history of the present stabilization movement to expect all such troubles to be eliminated. Most of these cases probably would die down with firming up of tank car. Third-grade gasoline is most affected. Higher octanes are slightly firmer than low-bracket material.

Jobbers Cautious

The week started with third-grade gasoline generally ruling around a low of 4¼ cents, although reports persisted that it was still available below that figure. Some carlot marketers reported offers to them below 4 cents for resale, but such cases appeared less frequent. Jobbers still watched the market cautiously before placing even small orders. Many sellers urged them to buy before higher tank wagon prices pushed the tank car market up, but most of them said they doubted tank wagon would advance before tank car itself showed real strength.

Special Naphthas

Special naphthas have shown independent firmness and are if anything a shade higher than a week ago. Buying has not been especially active, but offerings are not large, and gasoline is not pulling them down. Buyers are inclined to pay asked prices where they need material.

Kerosene

Neither has kerosene been subjected to much pressure. Rains throughout the Mississippi Valley have put farm lands in good condition for plowing and considerable kerosene has been moved by both major company distribution and by jobbers to farm channels. Ruling prices are at or near the best levels of the advance.

Furnace Oils and Fuels

Buying of furnace oils lacks a little of the snap recently noted, but the market shows no special weakness, and quotations are mostly quite firm. Most householders' storage is full, and most distributors also have plenty in their tanks. Thus the trade is waiting for cold weather to develop consumption. The same conditions are true in the better grades of fuels. As to industrial fuels and gas oils, the market as a whole is tight, although offers of industrial gas oils lately have been a little more frequent, and some of the prices are below best levels recently reached. Strength of crude is having a generally favorable effect on fuels, with railroads good customers.

NATURAL GASOLINE MANUFACTURE

California Average Daily Output Goes Up in August

The California daily average natural gasoline production increased 1,641 bbls. daily during August, principally due to increases in Huntington Beach and Kettleman Hills, and amounted to 32,676 bbls., according to the California office of the U. S. Bureau of Mines. Refinery utilization also increased substantially and amounted to 27,693 bbls. as compared to 22,000 bbls. daily the previous month. No natural gasoline was shipped off shore during August, while during July shipments amounted to 8,094 bbls. daily. Stocks held by natural gasoline plant operators decreased from 62,412 bbls. to 60,106 bbls. while stocks held by refiners increased from 2,556,924 bbls. to 2,702,632 bbls., so that during August there was a net increase in total stocks inside the territory of 143,402 bbls. Natural gasoline production from January to August, 1933, amounted to 7,731,000 bbls., a daily average of 32,000 bbls., which is a decrease of 1,153,000 bbls., or 4,000 bbls. daily, under 1932 production.

CALIFORNIA NATURAL GASOLINE STATISTICS FOR AUGUST AND JULY
(Data in barrels daily)

	August	July
Supply		
Total production	33,105	31,442
Stock trans.	(242)	(187)
Imports	2,327	....
Total	35,190	31,255
Deduct refinery requirements:		
Runs to stills	3,352	3,398
Blended	24,341	18,602
Total	27,693	22,000
(Losses) unaccounted for net	(2,455)	(3,884)
Net supply available to market	5,042	5,371
Demand		
Domestic consumption inc. bunkers	415	362
Offshore shipments:		
Alaska and Hawaii	1	0
Pac. foreign export	0	1,452
Atlantic fo'gn exports	0	6,642
Total market demand	416	8,456
Surplus or (deficit)	4,626	(3,085)
Stocks		
Inside Pac. Coast terr. At refineries	2,378,951	2,305,949
Elsewhere	383,787	313,387
Inside Pac. Coast terr. —last day	2,762,738	2,619,336
Inside Pac. Coast. terr. —first day	2,619,336	2,714,964
Increase or (decrease) during the period	143,402	(95,628)
OPERATING DATA FOR AUGUST		
Number of plants operating		101
Daily capacity, cu. ft.		2,338,152,000

PRODUCTION BY FIELDS

	Gas treated (M. cu. ft.)	Natural gasoline produced (gallons)
Fullerton and Whittier	429,440	1,155,447
Midway	1,608,726	2,830,814
Huntington Beach	1,515,629	2,766,273
Kettleman Hills	7,896,930	9,918,363
Long Beach	2,939,352	7,594,252
Richfield	505,373	551,745
Santa Fe Springs	4,362,876	7,200,348
Seal Beach	526,090	920,008
Ventura Avenue	3,096,151	3,028,706
All other fields	3,824,291	6,530,498
Total	26,704,858	42,546,454

PRODUCTION BY METHODS

Type of plant—	Gas treated	Natural gasoline produced (gallons)	Gasoline recovery per m.c.f. gas treated
Oil absorption	26,557,481	42,382,045	1.596
Compressor	147,377	164,409	1 116
Total	26,704,858	42,546,454	1.593
			Bbls.
Finished gasoline produced at plants			77

STOCKS

	Gallons	Barrels
Natural gasoline held by plant operators	2,524,454	60,106
Natural gasoline held by refineries	113,510,544	2,702,632
Total	116,034,998	2,762,738

LIQUEFIED PETROLEUM GASES

	August	July
Production	427	407
Sales	415	341

Revised Prices of Union Oil Co. Show Advances Throughout Its District

LOS ANGELES, Calif., Oct. 2.—Revision of the Union Oil Co.'s natural gasoline price schedule, effective October 1, in the 12 California fields in which it purchases, advances the figures throughout the whole range of vapor pressures. In the lower vapor pressure grades an advance of about 1¼ cents is revealed. In the higher grades the increase is a little under 1 cent.

The company posted its first price schedule May 1, 1933. In that table the price differential was based on each change of 2 pounds in vapor pressure. The October schedule continues the differential adopted July 1, showing a price difference for each pound variation in vapor pressure up to 26 pounds and using the 2-pound differential from that point up to 52 pounds as in the May schedule. The new prices follow:

Vapor pressure lbs./sq. in. Reid at 100° F.	Richfield	Huntington Beach	Brea	Santa Fe Springs	Long Beach	Dominguez	Rosecrans	Playa Del Rey	Santa Paula	Orcutt	San Joaquin Valley	Kettleman Hills
15.0-15.9	6.50	6.50	6 50	6 50	6.50	6.50	6.50	6 50	6 50	6 00	6 00	6.00
16.0-16.9	6.35	6 32	6.34	6 34	6.35	6 35	6 35	6 33	6 44	5.87	5.86	5.86
17.0-17.9	6 20	6.19	6.20	6.18	6 21	6.19	6 22	6 19	6 39	5 75	5.72	5 73
18.0-18.9	6 09	6.03	6 04	6 02	6.06	6 04	6 12	6 03	6 35	5.62	5.59	5.59
19.0-19.9	6.03	5 88	5 91	5.87	5.94	5.91	6 05	5 88	6 30	5 49	5.48	5 45
20.0-20.9	5.98	5 74	5.80	5 80	5.85	5 84	6 00	5 72	6 25	5.37	5.36	5.31
21.0-21.9	5 94	5.63	5.72	5.75	5.77	5.79	5 96	5 60	6 20	5 27	5.27	5 17
22.0-22.9	5 90	5.53	5.66	5 72	5 69	5.75	5 93	5 48	6 14	5 21	5.19	5.04
23.0-23.9	5.87	5 46	5 61	5.69	5.63	5 72	5 90	5 39	6 09	5.18	5 12	4 90
24.0-24.9	5.85	5 40	5.56	5 68	5 57	5.69	5 88	5 31	6 02	5 14	5.06	4.76
25.0-25.9	5 83	5.35	5.53	5.66	5.51	5 67	5 86	5 23	5 97	5.10	5 00	4 65
26.0-27.9	5.77	5.24	5.47	5 63	5.41	5 61	5 82	5.10	5 87	5.03	4.91	4 56
28.0-29.9	5.72	5 15	5 40	5.60	5.33	5 55	5 77	5 00	5 77	4.96	4 84	4 49
30.0-31.9	5.64	5 05	5.34	5 56	5 27	5.50	5 71	....	5 67	..	4 77	....
32.0-33.9	5.55	....	5.27	5 52	....	5 43	5.66	....	5.58	....	....	....
34.0-35.9	5 43	....	5 20	5.47	....	5 38	5 59	....	5.50	....	....	....
36.0-37.9	5.29	....	5.12	5.42	....	5.31	5 50	....	5 40	....	....	....
38.0-39.9	5.13	....	5 03	5.35	....	5 23	5 39	....	5.32	....	....	....
40.0-41.9	4.97	....	4.90	5.27	....	5.15	5.24	....	....	....	....	....
42.0-43.9	4.79	....	4.78	5 16	....	5.06	5 06	..	....	..	....	....
44.0-45.9	4.60	....	4 64	5.05	....	4.95	4.90	....	....	..	....	....
46.0-47.9	4 41	....	4 49	4 93	....	4 86	4 72	..	....	..	....	....
48.0-49.9	4 21	....	4.34	4.79	....	4.74	4.53	....	....	..	....	....
50.0-51.9	4.03	....	4 18	4.64	....	4 63	4 36	..	....	....	....	....
52.0-53.9	....	....	4 03	4 89	....	4 50	4 15	....	....	....	....	....

Gasoline Manufacturer and Refiner Have Common Problem in Using Light Ends

Natural gasoline manufacturers and refiners have a common problem of trying to find uses for the excess production of light petroleum fractions as by-products. These result from the stabilization of their other products. The natural gasoline manufacturer has been attempting to find outlets for propane, butane and their mixtures as convenient household fuels and some of the less volatile fractions have been included in other special fuels for the heat treatment of steel, etc.

The result has been that an expanding market for these products has been provided, but to only a small portion of their possible total production. The market would have increased more rapidly had not the general economic depression occurred just at the time when plans had been laid for a vigorous expansion program.

The refiner has been consuming his excess production of light fractions in his plant as fuel under the boilers and stills and in the case of those plants located in large industrial centers he has sold some gas to industries and to the public utilities for general distribution. This gas usually contained some recoverable light liquid fractions.

In either case, the utilization of these light fractions has not proved profitable to the refiner in a measure commensurate with the unusual qualities of the material. For this reason other uses have been investigated and two that promise to consume the largest volume involve their use in the processing of lubricating oils and the manufacture of high octane motor fuels.

Briefly stated, the use of these light fractions for the manufacture of lubricating oils is generally confined to the propane fraction. The liquefied propane is mixed with the raw lubricating oil and the composite is allowed to flow from a high pressure tank into a low pressure tank and the expansion and subsequent chilling permits the complete dewaxing of the oil.

The utilization of the light fractions for the manufacture of high octane motor fuels by means of polymerization are best described by Dr. A. R. Bowen and Dr. A. W. Nash of the University of Birmingham, England. The following is a summary of their paper before the World Petroleum Congress at London:

"Attention has been turned, in recent years, to various possible means of utilization of the gaseous olefines present in certain industrial gases. Gases produced simultaneously with petrol in oil cracking operations constitute a rich source of these olefines, especially in the case of the vapor phase processes. The gases produced in coal carbonization also contain olefines, and methods of separation involving liquefaction and fractionation have been suggested.

"The formation of liquid fuels by polymerization is an important means of utilization of gaseous olefines. The olefines have a marked tendency to polymerize especially under such influences as: Ultra-violet light, silent electric discharge, heat, pressure, catalysis, or combinations of these.

"From free energy calculations it has been shown that olefine hydrocarbons tend to polymerize below about 425° C., above which temperature cracking takes place, whilst the isomerization of the higher olefines into the corresponding naphthenes is possible below that temperature. The polymerization processes are usually exothermic and are favored by low temperatures and hence catalysts.

"In general, at lower temperatures the polymerization products of olefines include higher olefines and naphthenes, at medium temperatures higher olefines, paraffins, naphthenes and polynaphthenes, and at higher temperatures secondary reactions cause the formation of aromatic hydrocarbons.

"Research upon the formation of liquid fuels by polymerization of gaseous olefines can be divided under three headings:

Three Divisions

"1. Polymerization under pressure and at moderate temperatures;

"2. Polymerization under atmospheric pressure at high temperatures;

"3. Polymerization under pressure in the presence of anhydrous aluminum chloride.

"The conversion of gaseous olefines into liquid polymers at moderate temperatures and under pressure, without catalysts, is nearly complete, and a high proportion of the crude oil boils in the spirit range. The liquids formed under these conditions are not aromatic and they contain paraffins, naphthenes and higher olefines, such as the hexenes, in considerable quantity. The spirit produced under these conditions is about five-sixths as good as benzene in antiknock value when rated on a volume basis.

"At high temperatures, in the absence of catalysts, gaseous olefines are readily converted into aromatic hydrocarbons in quite good yields. The liquid products are similar to those obtained in the pyrolysis of paraffin gases at high temperatures, but the temperature necessary for the conversion to aromatic liquids is lower in the case of the olefine than the paraffin gases. The spirit fraction, containing benzene and other aromatic hydrocarbons including toluene, would thus be of good antiknock value.

"In the case of the polymerization of olefines with aluminum chloride, ethylene has received the most attention. This gas polymerizes under suitable conditions to a crude oil about half of which is spirit. This spirit is practically wholly paraffinic and has an octane number of between 70 and 80, the hydrocarbon constituents being, probably, to a large extent of the branched-chain type. This spirit has a very low freezing point. Undoubtedly the immediate homologues of ethylene would give very similar results."

INCREASE CANADIAN IMPORTS

Natural casinghead gasoline imported into Canada during June totaled 3,878,771 gallons worth $151,685; in May, 2,069,848 gallons at $78,587 were imported, according to the latest report of the Dominion Bureau of Statistics. Receipts of gasoline lighter than .8235 specific gravity at 60° temperature were recorded at 1,008,213 gallons appraised at $97,095; the May importations amounted to 5,451,951 gallons valued at $348,051.

Natural gas production in Canada during July was reported at 1,002,429,000 feet as against 1,131,376,000 feet produced in the previous month and 981,700,000 feet in July, 1932.

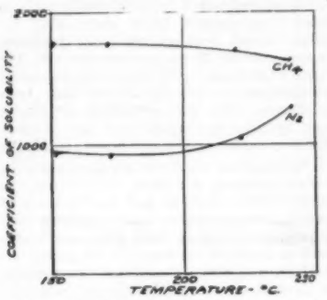
Solubility of Hydrogen and Natural Gas in Oils

(Continued from Page 14)

temperature and, secondly, the coefficient of solubility is decreasing with increase of methyl group in the benzol. This phenomena is more pronounced in investigation of solubility of hydrogen in gasoline, kerosene, cylinder oil and in paraffin base mazout.

Solubility of Hydrogen in Fractions

As is known, in order to bring the volume of gas given off to normal condition, it is necessary to take into consideration the vapor pressure of the liquid in which dissolving of gas takes place. Therefore, a series of determinations of vapor pressures of gasoline and kerosene at various temperatures was made.



Curve 5. Relation between coefficient solubility of CH_4 and N_2 in mazout and the temperature

The apparatus used for determination of vapor pressure of liquids consists of two barometric tubes, one of which was used for determination of vapor pressure, while the other was used for determination of atmospheric pressure.

The determination of solubility of hydrogen in gasoline, kerosene, cylinder oil and paraffin base mazout was carried out at various pressures and temperatures.

The results obtained are shown in Table 2, which is as follows:

TABLE 2

°C.	Pres. of H_2 in atmos.	C.c. of H_2 in 100 c.c. of liquid	Sol. of H_2 in 100°C. liquid at 100 atmos. of par. pres. (coef. of sol.)
Hydrogen—Gasoline (Sp. Gr. 0.711) Fraction 60-120° C.			
25	50	446.6	893
25	100	863.0	863
100	50	546.0	1,092
100	100	1,164.0	1,164
100	200	2,312.0	1,156
150	43.5	646.0	1,471
150	93.0	1,364.0	1,458
150	243.5	3,880.0	1,593
200	18	325.0	1,808
200	88	1,712.0	1,932
200	188	3,734.0	1,934
Hydrogen—Kerosene (Sp. Gr. 0.839)			
25	70	378.0	532
25	100	532.0	532
25	200	1,060.0	530
100	50	343.0	686
100	100	694.0	694
100	80	552.0	691
100	300	2,006.0	669
150	50	444.0	889
150	100	893.0	893
150	250	2,218.0	885
200	50	540.5	1,081
200	100	1,040.0	1,040
200	200	2,084.0	1,042
300	47	786.0	1,674
300	100	1,650.0	1,650
300	200	3,410.0	1,731
Hydrogen—Cylinder Oil (Sp. Gr. 0.525)			
200	30	251.6	839
200	100	794.0	794
200	150	1,129.0	820
200	300	2,173.0	724
300	90	1,040.0	1,155
300	150	1,600.0	1,100
300	250	2,535.0	1,014
Hydrogen—Paraffin Mazout (Sp. Gr. 0.93)			
200	100	722.0	722
200	150	922.6	661
200	300	2,304.0	768
200	300	2,262.0	754
300	200	2,150.0	1,075
300	150	1,590.0	1,060

Deviation from the average figure fluctuates between 0.2 and 2 per cent, which is a permissible error within experimentation with technical mixtures.

The following conclusions could be drawn from the results obtained:

1. The solubility of hydrogen in gasoline, kerosene, cylinder oil and paraffin base mazout follows Henry's law, and is illustrated in Curve No. 2.

2. With increase in temperature, the solubility is increased and the temperature coefficient remains positive (see Curve No. 3).

3. With increased hydrocarbon molecule, the coefficient of solubility is decreasing.

The Solubility of Methane and Nitrogen in Kerosene and Mazout

For determination of the solubility of methane, natural gas having the following analysis was used:

CO_2 — 0.5%	H_2 — 2.1%
CO — 1.4%	CH_4 — 61.1%
O_2 — 0.4%	N_2 — 34.2%

Because the coefficient of solubility for the above gases is not the same, and because the composition of the gas was changing during dissolving, it was necessary to take gas samples for analysis from liquid phase, as well as from gaseous phase. Knowing the solubility of gas at corresponding partial pressure it was possible then to calculate the coefficient of solubility of the gas.

The results are given in Table 3:

TABLE 3

Temp., °C.	Partial pressure of methane	Solubility of methane at given pressure	Partial pressure of nitrogen	Solubility of N_2 at given pressure	Solubility coefficient of—Methane	Nitrogen
Solubility of Methane in Nitrogen						
1.5	46.7	1,625	....	....	3,480	....
20	30.7	950	....	....	3,098	....
100	61.4	1,591	38.6	475	2,591	1,230
150	13.4	446	21.6	337	2,424	1,560
200	19.0	405	23.0	364	2,142	1,583
240	22.7	520	17.3	334	2,131	2,077
Solubility of Methane and Nitrogen in Mazout						
150	40.8	742	29.2	272	1,818	931
170	33.7	592	21.3	248	1,742	998
220	38.0	509	32.0	327	1,696	1,022
240	79.0	1,267	61.0	761	1,602	1,242

Analyzing the results obtained, one can notice that the solubility of nitrogen in kerosene as well as in mazout, increases with increase in temperature from 100° to 240° C., while the solubility of methane decreases with increased temperature. It is well illustrated in Figures 4 and 5.

Conclusions

1. The solubility of hydrogen in gasoline, toluol, xylol as well as in gasoline, kerosene, cylinder oil and mazout, is increasing in proportion to the pressure up to 300 atmospheres.

2. By increasing the temperature in the limits between 25° and 300° C. the coefficient of solubility in all enumerated hydrocarbons and mixture in 1, is increased.

3. The solubility of hydrogen in hydrocarbons is decreasing with the complexity of the composition of the molecule. It is the greatest for the benzole and gasoline, and the smallest for mesitylene and mazout.

4. The solubility of nitrogen in hydrocarbons is increasing with increase in temperature, beginning with 100° C.

5. The solubility of methane opposite to hydrogen in nitrogen is decreasing with increased temperature.

In conclusion, we consider it our pleasant duty to express our thanks to Professor Lavrobsky (GINI) for getting appropriations for this work.

Rubber in Many Forms Plays an Important Part

(Continued from Page 16)

not common in actual practice. The swivel is packed with special rubber packing.

In slush pumps there is considerable packing used, most of it containing some rubber. Liner sleeves made of rubber are still used in some slush pumps. Packing for the rods on the water end of the pump and valve seats contain some rubber also.

High pressure water hose is used for many purposes around the rig and it is usually of high grade and contains considerable rubber. Hose for conducting air, gas and steam is also used around the derrick and most of this hose contains rubber.

On the drill stem it is very common practice to use rubber protectors to keep the stem from rubbing against the casing unnecessarily and causing undue wear.

Completing the Well

Having drilled the well to the pay formation it is now necessary to set casing. While several strings of casing may be used in the hole the same method of cementing it into place is used in setting each string. The cementing outfit uses much high grade hose for conveying the wet cement from mixer to well. The pumps needed to move this cement use rubber packing in many places. In some types of float plugs sheet rubber is used for packers. The float plugs are used in the hole to control the movement of the cement.

Having the flow string in the hole it is next necessary to bring the well in and this may be done by swabbing. Swab rubbers are used for this purpose carried in heavy wire cages. If the well is not swabbed in it may be washed in with fresh water in which case hose is used between pumps and casing or tubing head.

If the well is tested with a drill stem tester before being completed rubber is used in the packers on the tester. This device consists of a valve body and valve made of steel and seated in the drilled hole by means of a rubber packer that surrounds a portion of the valve body. The tester is screwed to the end of the drill stem and lowered into the hole until the packer seats. The drill stem is then turned to open the valve and the oil or gas in the formation below the packer will enter the drill stem and indicate the commercial importance of the discovery.

Well on Production

To put the well on production it is necessary to provide an oil and gas separator to handle the flow from the well, and lease storage tanks to hold the oil and deliver it to the pipe line companies.

Oil and gas separators are usually built for high pressures but they are fitted with relief valves and blowoffs and gaskets containing rubber are used in fitting these accessories to the separator body.

In building the lease storage tanks it is now common practice to use sheet steel plates bolted together and rubber gasket or packing is used in all seams and joints. This gasket must be made from the best quality rubber and a considerable quantity of it is used in the oil fields each year both on new tanks and on resets.

The storage tanks are also fitted with relief valves, pressure gauges and thief hole covers. All of these fittings are attached to the tank deck with bolts and rubber gaskets used to make tight seat between body of the valve of accessory and the tank deck sheet.

The oil from the lease tanks is pumped through small steam pumps or electrically driven outfits and in either case some rubber is used. V-belt drive for the pumps are now quite commonly used. Rubber gaskets and packing are used freely around these small gathering pump stations.

The oil is transferred from the gathering tanks to the main pipe line and moved from point to point in the pipe line system with heavy duty pumps of either centrifugal or reciprocating type using rubber in packing and gaskets. At pump stations considerable rubber packing is used as well as gasket and rubber insulated wire for electrical transmission of current.

In laying the steel pipe lines patented couplings are used and most of them require special rubber gaskets and packing to make the joints tight. In new work the tonnage of gaskets for such couplings is a very important item of expense. Replacements are constantly being made in pipe lines and this repair work needs rubber gaskets for couplings also. Welded lines require the usual rubber hose for welding outfits.

Most pipe line companies require that rubber mats be placed in front of all switchboards. Some stations use rubber floor matting for walkways. Rubber-covered cloth is used to make covers for small auxiliary units that are only used part time.

Pumping Wells

After a period of natural flow all oil wells require some form of mechanical lift. Pumping with rods, lifting the fluid with air or gas, securing the oil by the use of various types of submerged pumps or lifting devices operated with electricity or compressed air or gas, and producing with plunger lifts are a few of the methods employed.

When sucker rods are used there is a polished rod at the well head that passes through a stuffing box in which there are packing rings made of rubber. About four of these rings are used to each stuffing box and the total volume of this business is large when it is considered that there are thousands of oil wells pumped by some form of beam with sucker rods and polished rods connections.

Cups for common working barrels go hand in hand with the sucker rods pumped wells. Power is furnished to many of these wells from central bandwheel power plants where power is transmitted from the gas engine to the bandwheel by heavy duty rubber belt. Where the wells are pumped with individual units such as walking beam steel fronts or self contained pumping units the power is transmitted by either flat or V-belts in many of the outfits.

Where endless belts are used it is good practice to use belt tighteners or idlers and one type of tightener is provided with rubber bumpers or cushions above and below the bearing boxes on each side of the idler pulley.

When old wells fall off in production to the point where they are no longer profitable to operate it is sometimes advantageous to shoot them with nitroglycerin. The shooters carry this dangerous explosive in cans and the cans are packed in rubber jars so that shocks are minimized.

Where wells are treated with acid to increase production good grade of hose is used to handle the acid between truck tank and well head. Acid proof gloves are also necessary in this kind of work and rubber boots and rubber aprons can be used to good advantage if full protection is desired.

In running strings of tubing blowout preventers are used in the event the well is tubed under pressure and these preventers are equipped with rubber packers that fit tightly around the tubing when the clamps are closed.

In the event an oil or gas well gets on fire the fire fighters are provided with the best grade of rubber boots and firemen's coats especially treated to withstand heat while fighting the fire. These items run into considerable sums of money when a company is so unfortunate as to have a mishap of this kind but they are necessary if the well is to be brought under control.

Refining

Having produced the oil and delivered it to the tank farms of the refiners it is next necessary to follow the use of rubber in this manufacturing process. Like

every manufacturing process there are numerous machines used for all purposes and very few machines are built without rubber finding a place somewhere in the mechanism. It will therefore be very difficult to list in detail many places where rubber parts are used around the refinery but the main uses for rubber are sufficient to impress one with the importance of this commodity in the refinery division of the petroleum industry.

Modern storage tanks are usually equipped with floating roofs or decks. These decks are made tight by the use of rubber packing and the deck seams packed with rubber gaskets. Depending upon detail of design there are other places where rubber goods may be used but all floating decks use considerable rubber in their construction and maintenance.

Transferring oil and products of petroleum from one vessel to another around the refinery requires the use of good high grade hose in many instances. Acid is used in part of the refinery process and it is handled with acid hose. Air hose and steam hose is used extensively in various parts of the plant. Everywhere rubber packing and gasket is used and special rubber packers and gaskets used for pumps and prime movers.

Belting and belt conveyors are used extensively in all refineries. In the lubricating department fuller's earth is used extensively and it is moved from place to place upon rubber belt conveyors. Conveyors are also used to handle products that have been packed in tin cans.

Loading and unloading tank cars is done with rubber hose used for the flexible connections between pipe rack and cars and between bottom connection on tank car and receiving tanks. The manholes on tank cars are sealed with special rubber gaskets, an important item.

Where the refineries are located at dock side large hose is used for loading sea-going tankers. This is a very heavy special duty piece of rubber goods. Steam hose is used in cleaning both tank cars and tankers as well as for clean up purposes in various parts of the refinery.

The rubber packing used around refineries is required for a variety of uses. Refining involves the transfer of hot and cold oil over a long range of pressures; the handling of steam, hot water, and chemicals, and there probably is no industry calling for a wider range of packing than in refining of crude oils.

The same general statement is true of other rubber goods. Many special devices and pieces of apparatus are used around the refinery and in the laboratory that use some rubber. Rubber cases, special molded parts and numerous items built into the special equipment all use their quota of rubber and in the aggregate total to a very appreciable amount of business.

Marketing

Nearly every one comes in contact with the filling stations where petroleum products are sold to the public. It is easy to observe that there is a great deal of hose used around such stations for gasoline, air and water. The hose from the gasoline pump to the tank on the car is a special type of metal-lined hose that is expensive and forms a very considerable item in the distribution of petroleum products.

Between the refinery and the filling stations there are numerous bulk stations where hose and packing is used extensively. Hose for filling truck tanks is needed and each truck tank carries some hose as part of its regular equipment.

Car washers are quite common accessories to filling stations and in these departments hose is used extensively as well as rubber boots and in many instances rubber gloves and aprons.

Miscellaneous Items

Natural gas is converted into gasoline in special plants erected in or near the oil fields and in such plants a considerable amount of rubber and rubber goods is used. Belting, hose, packing and gaskets are common items. The upkeep of such plants requires renewal of many of these parts at regular intervals and this insures a steady volume of business from this branch of the petroleum industry.

Electricity is coming into very general use in all branches of the petroleum industry and electricians find employment in every department. The pipe line departments maintain telephone and telegraph systems and use rubber-covered wire and other insulated material. The electrician is also employed around the refineries. In any of this work he uses specially constructed rubber gloves that are tested to resist the passage of currents up to 10,000 and 14,000 volts. These gloves are manufactured by a form of the electrolytic process, the pure rubber being deposited upon a form by an electric current insuring both high purity of the rubber glove when made and at the same time checking the article against leakage of electric current.

The general items covered are those bought by the purchasing departments of the various departments of the oil companies. Their total purchases amount to a considerable sum each year and the nature of the uses to which rubber products are put in this industry seems to require renewals at regular intervals. Without rubber the petroleum industry would find it difficult to function in any of its various departments, but having it available in every form needed it is taken for granted that it will continue to be easy to seure. This, however, does not decrease the important part that it plays in the production, refining and marketing of petroleum and its products.

DEATH OF ROBERT S. WESTCOTT

Robert S. Westcott, of 178 Prospect Park West, Brooklyn, N. Y., for the past 16 years treasurer of Metal Hose & Tubing Co., Inc., of Brooklyn, manufacturers of Triplexd Gasoline Hose, died suddenly September 26 after a brief illness. He was 53 years old. Mr. Westcott was formerly associated with the American Book Co. and the Bosch Magneto Co.

WILCOX PRORATION SUIT

H. F. Wilcox Oil & Gas Co. has filed a suit attacking all proration orders of the Oklahoma Corporation Commission from November 1, 1931, until April 10, 1933, in the State Supreme Court.

California Crude Oil Prices

STANDARD OIL CO. OF CALIFORNIA
(Effective September 6, 1933)

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above those quoted take highest price offered in that field.)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier La Habra	Montebello	Santa Fe Springs	La Habra-Coyote	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote
14-14.9	$.65	$.65	$.65	$.65	$.65	$.65	...	$.65	$.65	$.65	$.65	...	$.65	$.57	$.57	$.57	$.65
15-15.9	.65	.65	.69	.69	.66	.69	...	.66	.65	.65	.65	...	.65	...	...	...	.65
16-16.9	.66	.65	.72	.72	.69	.73	...	.69	.67	.68	.65	...	.65	...	...	...	.65
17-17.9	.69	.65	.75	.74	.73	.76	...	.72	.70	.71	.65	...	.68	...	...	...	.68
18-18.9	.72	.65	.78	.80	.76	.79	...	.75	.74	.74	.65	...	.71	.61	.61	.59	.71
19-19.9	.75	.65	.81	.82	.80	.82	...	.78	.78	.78	.65	...	.74	.64	.65	.62	.74
20-20.9	.78	.68	.83	.87	.83	.85	...	.81	.82	.81	.66	...	.78	.67	.69	.65	.78
21-21.9	.81	.72	.86	.90	.87	.88	...	.83	.85	.84	.69	$.72	.81	.70	.73	.68	.81
22-22.9	.84	.76	.89	.94	.90	.92	...	.85	.89	.87	.72	.76	.84	.73	.76	.72	.84
23-23.9	.88	.81	.92	.97	.94	.95	$.83	.89	.93	.90	.76	.79	.87	.77	.79	.75	.87
24-24.9	.91	.85	.95	1.01	.97	.98	.86	.92	.97	.93	.80	.83	.90	.81	.82	.78	.90
25-25.9	.94	.89	.98	...	1.00	1.01	.90	.95	1.00	...	.85	.87	.93	.85	.85	.81	.93
26-26.9	.97	.93	1.01	...	1.04	1.04	.94	.98	1.04	...	.89	.90	.96	.89	.88	...	.96
27-27.9	1.00	.98	1.04	...	...	1.07	.97	...	1.08	...	...	.94	.99	.93	.91	...	.99
28-28.9	1.03	1.02	1.07	...	...	1.10	1.01	...	1.11	...	...	.98	1.02	.97	.94	...	1.02
29-29.9	1.06	1.05	1.09	...	...	...	1.04	...	1.15	...	...	1.01	1.05	1.01	.97	...	1.05
30-30.9	1.09	1.10	1.12	...	...	...	1.08	...	...	...	...	1.05	1.09	1.05	1.00	...	1.09
31-31.9	...	...	...	...	...	...	1.12	...	...	...	...	1.09	1.12	1.09	...	...	1.12
32-32.9	...	...	...	...	...	...	1.15	...	...	...	...	1.12	1.15	1.12	...	...	1.15
33-33.9	...	...	...	...	...	...	...	...	...	...	...	1.16	1.18	1.17	...	...	1.18
34-34.9	...	...	...	...	...	...	...	...	...	...	...	1.19	1.21	...	...	...	1.21
35-35.9	...	...	...	...	...	...	...	...	...	...	...	1.23	...	...	...	...	...
36-36.9	...	...	...	...	...	...	...	...	...	...	...	1.26	...	...	...	...	...
37-37.9	...	...	...	...	...	...	...	...	...	...	...	1.30	...	...	...	...	...
38-38.9	...	...	...	...	...	...	...	...	...	...	...	1.34	...	...	...	...	...

Additional Standard Oil Quotations

Elwood Terrace—F.o.b. ship, 33 degrees, $1.03; 34 degrees, $1.06; 35-35.9, $1.09; 36-36.9, $1.12; 37 degrees and over, $1.15.
Newhall—14 degrees and over, 57 cents.
McKittrick and Kern River—14 degrees and over, 57 cents.
Wheeler Ridge—14 to 17.9 degrees, 57 cents; 18-18.9, 58 cents; 19-19.9, 61 cents; 20-20.9, 64 cents; 21-21.9, 67 cents; 22-22.9, 70 cents; 23-23.9, 73 cents; 24-24.9, 76 cents; 25 degrees and over, 79 cents.
Kettleman Hills—33-33.9 degrees, 93 cents; 34-34.9, 96 cents; 35-35.9, 99 cents; 36-36.9, $1.02; 37-37.9, $1.05; 38-38.9, $1.08; 39 degrees and over $1.11.

The Texas Co. posted in Shiel Canyon, South Mountain and Santa Paula as follows: 14 to 17.9, 57 cents; 2 cents added for each degree up to and including 26-26.9 degrees at 84 cents; then 4 cents added for each degree up to and including 30 degrees and over at $1. Company posts Standard Oil Co.'s Montebello prices in Montebello and North Whittier, and posts Standard Oil Co. prices in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield and Santa Fe Springs, all effective September 6.

General Petroleum Co. posts Standard Oil Co. prices in Athens, Rosecrans and Signal Hill; Alamitos Heights up to 26-26.9; Santa Fe Springs up to 35-35.9; Richfield up to 25-25.9; Brea Canyon and Olinda up to 25-25.9, and Torrance up to 35-35.9.

Union Oil Co., effective September 6, posts same prices as Standard Oil Co. in all fields in which both purchase, excepting that in Athens-Rosecrans, Union Oil Co. posts 21-21.9, 72 cents, and 33-33.9, $1.13; 34-34.9, $1.21, and 35-35.9, $1.24.

Associated Oil Co., effective September 6, posted same prices for the same grades as Standard Oil Co. of California, excepting that in some fields its gravity scale stops as follows: Huntington Peach, 26 degrees and over; Seal Beach and Alamitos Heights, 26 degrees and over; Coyote Hills, 23 degrees and over; Richfield, 25 degrees and over; Torrance, 25 degrees and over; Inglewood, 24 degrees and over; Santa Fe Springs, 35 degrees and over; Midway-Sunset, Elk Hills, Buena Vista Hills, 30 degrees and over. Also Associated pays 52 cents for oil of 11 to 13.9 gravity in McKittrick, Kern Front, Kern River, Midway-Sunset, Elk Hills, Buena Vista Hills, and Coalinga.

Crude Oil Prices

(Continued from Page 23)

Osage (Jan. 18, 1933)	.52
Lost Soldier (Sept. 30, 1933)	.88
Hamilton Dome (Dec. 16, 1932)	.25
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera (June 17, 1933)	.75
Sunburst (Sept. 29, 1933)	1.35
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.70
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Sept. 29, 1933)	.70

Note—Salt Creek, Torchlight, Elk Basin, Grass Creek, Frannis, Greybull, Hogback and Iles by Stanolind Oil & Gas Co. Elk Basin, Grass Creek light, Big Muddy, Rock Creek and Sunburst by Ohio Oil Co. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Lea County, effective September 29, by Humble Oil & Refining Co. and other buyers; Fort Collins, Wellington, Orchard, Florence, Big Muddy, Cat Creek, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro.
*Continental Oil Co.

North Louisiana and Arkansas

Smackover, Ark (all grades)	$.70
Urania, La. (Oct. 3, 1933)	.75
Nevada, Ark. (Sept. 29, 1933)	.60
East El Dorado (Sept. 29, 1933)	.70
Other fields	(See gravity table)

Note—Smackover: Effective September 29, 1933, Texas Co., Magnolia Petroleum Co., Standard of Louisiana, Louisiana Oil Refining Corp., Gulf Refining Co. and Phillips Petroleum Co. East El Dorado posted by Magnolia Petroleum Co. and Gulf Refining Co., Nevada by Standard Oil Co. of Louisiana. Urania posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective September 6, 1933)

Bradford, Pa.	$2.35
Allegany, N. Y.	2.35

SOUTH PENN OIL CO.
(Effective September 6, 1933)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	$2.26
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	2.02
Penna Grade Oil in Eureka Pipe Line Lines	1.97
Penna Grade Oil in Buckeye Pipe Line Lines	1.92
Corning Grade Oil in Buckeye Pipe Line Co.'s lines (Oct. 2, 1933)	1.32

PENNZOIL CO.
(Effective September 6, 1933)

Pennsylvania Grade Oil in National Transit Lines:	
Group A	$2.27
Includes Cochran, Franklin, Hamilton and Doolittle districts.	
Group B	2.26
Includes Titusville district.	
Group C	2.25
Includes Turkey and Tidioute districts.	
Group D	2.24
Includes Bear Creek and Porkey districts.	
Group E	2.22
Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson, Kennerdell, Emlenton, Tiona, Lacy and Kinzua districts.	
Price depends on length of pipe line haul to plant at Oil City.	

PURE OIL CO.
(Effective September 6, 1933)

Cabin Creek, W. Va.	$2.07
Bradford Hollow, W. Va.	2.07
Kelly Creek, W. Va.	1.97

Middle Western States

OHIO OIL CO.
(Effective September 29, 1933)

Lima	$1.30
Illinois	1.22
Princeton, Ind.	1.23
Plymouth	Shut in
Western Kentucky	1.18
Midland, Mich. (Sept. 30, 1933)	1.02
Somerset, Ky. (Sept. 30, 1933)	1.23
Hart County, Ky. (Oct. 1, 1933)	1.18

*Posted by Pure Oil Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted price. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and posted price includes premium. Hart County, Kentucky, crude purchased by Stoll Refining Co.

Canada

Ontario (September 9, 1933):	
Petrolia*	$2.10
Oil Springs*	2.17
Turner Valley (September 11, 1933):†	
Clear naphtha	$3.50
Discolored naphtha	3.26
Crude oil, 50 gravity	2.93
Crude oil, 45 to 49.9	2.36
Crude oil, 40 to 44.9	1.61

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

Mexico

Panuco*	$.466

*F.o.b. ship, based on August transactions and exclusive of production and export taxes and bar dues.

Henry T. Staiti, Pioneer in Gulf Coast Area, Dead

HOUSTON, Tex., Oct. 2.—Henry T. Staiti, 57, pioneer in the development of Gulf Coast oil fields, died in his office

HENRY T. STAITI

here today an hour after being stricken with sudden illness.

Mr. Staiti was president of the Houston-Oklahoma Oil Co., American Sulphur Royalty Co. and the Valley Oil Corp. He was vice president of the Universal Sulphur Products Co. and of the Pathfinder Oil Corp. and vice president and general manager of the Texas Exploration Co. With associates he developed the sulphur mines in Freeport, Tex.

Late Fields

OKLAHOMA

Amerada Petroleum Corp.'s No. 1, C NW NW SW, Section 33-7-4, Pottawatomie County, Oklahoma, an old well drilled deeper, swabbed 659 bbls. in 24 hours from dolomite pay at a total depth of 4,181 feet.

Sinclair Prairie Oil Co.'s No. 1, C NE NE SW, Section 28-17-4w, in the Crescent Pool, Logan County, cemented 9-inch casing at 5,075 feet and the crew was waiting for cement to set. In the same area Continental Oil Co.'s No. 1, C SE SE, Section 28-17-4w, set 9-inch pipe at 4,951 feet.

Stanolind Oil & Gas Co.'s No. 1, C NW NE, Section 33-20-2w, Lucien Field, Noble County, found sands at 4,895-4,907 and 4,967-75 feet and had 600 feet of oil in the hole. The crew was cleaning out 20 feet off bottom.

OKLAHOMA ACCEPTS ORDER

The Oklahoma Corporation Commission has reduced allowable production in this State to 495,000 bbls. daily.

The allocations by the Federal administrator, separated into production and withdrawals, figure as follows:

CRUDE OIL ALLOCATIONS

	Total	From stocks	Net production
Arkansas	32,000		32,000
California	455,000	15,000	440,000
Kansas	116,000	10,000	106,000
Louisiana	70,000	5,000	65,000
Texas	965,000	40,000	925,000
Oklahoma	495,000	25,000	470,000
New Mexico	41,400		41,400
Rocky Mountain	38,900		38,900
Appalachian	94,200		94,200
Michigan	30,000		30,000
Total	2,337,500	95,000	2,242,500

TEXAS COMMISSION ACTS

AUSTIN, Tex., Oct. 2.—Effective at 7 a. m., October 1, production of all Texas wells, including stripper wells, was ordered by the Texas Railroad Commission to be reduced 1½ per cent from the proration allowable under the first Federal oil allocation, or from 975,200 bbls. daily to 960,000 bbls.

New Price Change Brings Mid-Continent Crude Closer to the Dollar Average

By JAMES McINTYRE

Oil producers west of the Pennsylvania grade fields and east of California were given another price advance in the past week. Thirty-six gravity crude oil in Oklahoma and Kansas has reached the dollar mark, but 36 gravity crude in the Mid-Continent as a whole has yet to reach the coveted $1 price.

East Texas oil for the first time in years is now selling at $1 per barrel, and the producer, who in 1931 sold 50,000 bbls. of crude for $1,250 to satisfy clamoring creditors, must groan in spirit when he contemplates what might have been, and the misguided oil men who threw millions of barrels of oil on an illicit market at 10 to 20 cents now have an opportunity to figure up just how much they might have been worth had they played according to rules.

Led by Texas Co.

The Texas Co. was responsible for the latest rise in the crude oil market. That company on September 29 advanced Oklahoma, North Texas, Central Texas, East Central Texas, Arkansas and North Louisiana prices 11 cents per barrel where it purchases on a gravity basis. Every purchasing company in Kansas, Oklahoma, Arkansas and Louisiana met the advance which spread also to the Gulf Coast, Southwest Texas and West Texas.

Buyers in Montana, Wyoming, Colorado and New Mexico were prompt to follow suit and likewise in Lima, Indiana, Illinois, Michigan and Kentucky and in the Corning Pool in Ohio.

As a rule the pools in which a flat price is paid were advanced 10 cents but there were some which were given even greater price increases.

Under the new price schedules Kansas and Oklahoma crude oils range in price from 76 cents for below 25 gravity up to $1.08 for 40 gravity and over. In North Texas, Central Texas, East Central Texas, North Louisiana and El Dorado, Arkansas, the new schedules range from 79 cents for below 29 gravity up to $1.03 for 40 gravity and over. In the North Louisiana-Arkansas territory the Standard Oil Co. of Louisiana and the Louisiana Oil Refining Co. pay a different set of prices in different pools, higher in some and lower in others than the schedules of other purchasers, but on an average very much the same.

In the Texas Panhandle prices were advanced 10 cents per barrel on each grade with a high in Gray County of 91 cents for 40 gravity and over, and in Carson, Hutchinson and Moore Counties of 81 cents for 40 gravity and over.

Conroe, Texas, crude now ranges from $1.09 for 35-35.9 degrees up to $1.19 for 40 degrees and over.

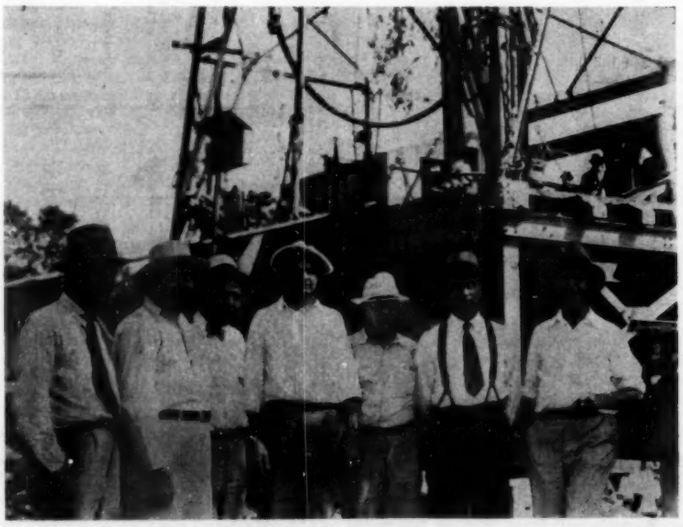
East Texas $1

East Texas was advanced to $1, Saxet to 85 cents; Refugio, heavy crude, 85 cents; Mirando, 80 cents; Pettus, $1.05; Salt Flat, 87 cents; Darst Creek, 87 cents; Tomball, $1.15; Greta, 85 cents; Duval County, 80 cents; Livingston, $1; Lytton Springs, 95 cents; Luling 75 cents; Smackover, Ark., 70 cents; Nevada, Ark., 70 cents. Crane, Upton, Crockett, Howard, Glasscock and Mitchell Counties, 75 cents; Ector, Winkler and Pecos Counties, Texas, and Lea County, New Mexico, 70 cents.

In the Rocky Mountain fields the price advances were usually 11 cents per barrel. The new prices make Iles light, 96 cents; Iles heavy, 90 cents; Big Muddy, $1.01; Frannie, light, 87 cents; Frannie, heavy, 62 cents; Salt Creek and Dutton, same as Oklahoma; Grass Creek, light, $1.18; Elk Basin, $1.18; Rock Creek, $1.02; Lost Soldier, 88 cents; Torchlight and Greybull, $1.18; Sunburst, $1.35; Hogback, $1.11; Maljamar, Artesia, Jackson and Lea County, New Mexico, 70 cents.

In the old Central West fields the new prices are Lima, $1.30; Illinois, $1.23; Princeton, Ind., $1.23; western Kentucky, $1.02; Somerset, Ky., $1.23; and Hart County, Kentucky, $1.18; Corning, Ohio, $1.32.

Officials Look Over the Discovery in Anderson County, Texas



Group of Tide Water Oil Co. and Texas Seaboard Oil Co. officials visiting their discovery well in Anderson County, Texas. From left to right, they are: C. P. Watson, vice president of the Seaboard Oil Co., Los Angeles; James R. Gahan, vice president Tide Water Oil Co., Houston; R. S. McFarland, vice president of Texas Seaboard Oil Co., Dallas; John M. Lovejoy, president Seaboard Oil Co., New York; R. B. Pringle, vice president Tide Water Oil Co., of Oklahoma, Tulsa; E. L. Shea, president of Tide Water Oil Co., New York; E. H. Salrin, vice president of Tide Water Oil Co., Tulsa

Considers Price Fixing at Service Stations

(Continued from Page 8)

of reductions, so that the total allowable production according to his order of September 2, which was 2,400,700 bbls., is reduced by the order issued today to a total of 2,338,500 bbls.

The allowables of the order of September 2 were as follows:

Arkansas	27,000
California	480,000
Kansas	112,000
Louisiana	70,000
Texas	975,200
Oklahoma	540,000
New Mexico	41,400
Rocky Mountain States	38,900
Appalachian States	94,200
Michigan	30,000
Total	2,409,700

The decreases in the foregoing allocation are shown in the following order issued by Secretary Ickes today:

Pursuant to the provisions of Sections 3 and 4 of Article 3 of the Code of Fair Competition for the Petroleum Industry approved by the President August 19, 1933, under the provisions of Title 1 of the National Industrial Recovery Act, approved June 16, 1933, and on the recommendation of the Petroleum Administrative Board and the facts submitted in support thereof, the current estimate of required daily production of crude oil to balance consumer demand for petroleum products has been found by the Department of the Interior to be 2,338,500 bbls. and the allocations among the several petroleum-producing states are hereby certified to be as follows:

Arkansas	33,000
California	455,000
Kansas	116,900
Louisiana	70,000
Texas	965,000
Oklahoma	495,000
New Mexico	41,400
Rocky Mountain States	38,900
Appalachian States	94,200
Michigan	30,000
Total	2,338,500

The foregoing allocations shall be effective under the aforesaid Code of Fair Competition as of 7 a.m., October 1, 1933.

It is hereby further ordered that in accordance with Section 2 of Article 2 of the aforesaid code, until further notice, the following states may allocate part of their allowable to withdrawals from crude oil storage not to exceed the following amounts:

	Bbls. per day
Oklahoma	25,000
Texas	40,000
California	15,000
Kansas	10,000
Louisiana	5,000

Such withdrawals from storage shall be assigned by the appropriate state regulatory body to such persons as have received permission from the Planning and Co-ordinating Committee and the approval of the Petroleum Administrator to make the withdrawals.

It is hereby further ordered in accordance with Sections 3 and 4 of Article 2 of the aforesaid code that excess production or withdrawals in any state during September shall be charged against the allowable of that state for October and the same policy rigorously adhered to during subsequent months.

It is hereby further ordered that in accordance with Section 1 of Article 3 of the aforesaid code, until further notice, imports of crude petroleum and petroleum products shall be limited to an amount not exceeding the average daily imports of petroleum and petroleum products during the last six months of 1932.

CALIFORNIA IN LINE

LOS ANGELES, Calif., Sept. 30.—Regional Committee No. 6 has set California's allowable daily quota for October at 455,000 bbls., 15,000 bbls. in excess of the maximum established by Secretary Ickes but this does not conflict with the secretary's schedule as California operators do not expect to reduce stocks during the period. Secretary Ickes prescribed a maximum of 455,000 bbls. and allowed for draft on stocks of 15,000 bbls. daily, which would have reduced the allowable daily production to 440,000 bbls.

Preliminary Program, Fourteenth Annual Meeting of A.P.I.

(Continued from Page 13)

8 P.M.

DIVISION OF MARKETING

Marketing Session—North Ballroom.

Presiding: J. W. Carnes, Sinclair Refining Co.
Training of Salesmen, Bryan Houston, Standard Ohio Co. of Ohio.
Marketing Expenses and How They Should Be Divided, Stuart Giraud, Humble Oil & Refining Co.
Should Automobile Specialties Be Sold at Gasoline Stations, and If So, What? B. K. Davies, Standard Oil Co. of California.

Thursday, October 26, 1933

GROUP SESSIONS

10 A.M.

DIVISION OF PRODUCTION

Drilling and Production Problems—South Ballroom.

(Sponsored by the Central Committee on Drilling and Production Practice.)
Presiding: H. N. Marsh, General Petroleum Corp. of California.
Compliance with A.P.I. Specifications on Oil Field Equipment, J. Edgar Pew, Sun Oil Co.
Reconditioning of Oil Wells. California Drilling Practice Committee (Presented by W. C. Whaley, Barnsdall Oil Co.).
Reconditioning Wells in the Oklahoma City Field, C. E. Wright, Indian Territory Illuminating Oil Co.
Well Interference in Big Lake, Texas, E. V. Foran, Consulting Engineer.
Behavior of Hydrocarbon Mixtures, Illustrated by a Simple Case, William N. Lacey, B. H. Sage, and J. G. Schaafsma, California Institute of Technology. (This paper presents some results from A.P.I. Research Project 37 on the Fundamentals of the Retention of Oil by Sand.)
Report of Division's Nominating Committee, John R. Suman, Humble Oil & Refining Co., Chairman.
Election of Twenty Members of the General Committee of the Division of Production.

10 A.M.

DIVISION OF REFINING

Refining Session—North Ballroom.

Presiding: H. W. Camp, Empire Oil & Refining Co.
Production of Contact Sulphuric Acid From Refinery Acid Sludge, F. J. Bartholomew, and S. F. Spangler, Chemical Construction Co.
Chemical Constituents of Petroleum (A.P.I. Research Project 6), E. W. Washburn, U. S. Bureau of Standards.
Twenty Years of Research in Petroleum, A. E. Dunstan, Anglo-Persian Oil Co.
Fundamental Factors Governing the Design of a Vapor-Phase Cracking Coil, H. C. Schutt, Alco Products, Inc.
Report of Division's Nominating Committee, W. W. Lowe, Henry L. Doherty & Co., Chairman.
Election of Twenty Members of the General Committee of the Division of Refining.

10 A.M.

DIVISION OF MARKETING

Marketing Session—Grand Ballroom.

Presiding: H. W. Dodge, Texas Co.
Federal Tax Regulations for Gasoline and Lubricating Oils, Willis Crane, National Petroleum Association.
What Marketing Departments Might Do to Improve Public Relations, Edward L. Bernays, New York City.
A View of the Oil Industry From the Sidelines, Warren C. Platt, National Petroleum News.
Report of the Division's Nominating Committee, E. J. Bullock, Standard Oil Co. (Indiana), Chairman.
Election of Twenty Members of the General Committee of the Division of Marketing.

2 P.M.

DIVISION OF PRODUCTION

Pipe Line Transportation—South Ballroom.

(Sponsored by the Committee on Corrosion of Pipe Lines.)
Presiding: C. R. Weidner, Sinclair Prairie Pipe Line Co.
Progress in Corrosion-Protection of Pipe Lines, Gordon N. Scott, National Bureau of Standards.
The Development and Application of a Practical Method of Electrical Protection for Pipe Lines Against Soil Corrosion, Starr Thayer, United Gas System.
Cathodic Protection of Pipe Lines, R. J. Kuhn, New Orleans Public Service, Inc.
Advances in Maintenance and Repair of Pipe Lines, W. G. Heltzel, Stanolind Pipe Line Co.

2 P.M.

DIVISIONS OF REFINING AND MARKETING—JOINT SESSION

Automobile Operation—North Ballroom.

Presiding: E. W. Isom, Sinclair Refining Co.
(This topic is divided into two parts: Part 1—How Can the Petroleum Industry Help the Automotive Industry? Part 2—How Can the Automotive Industry Help the Petroleum Industry? A general discussion of the common problems of the two industries will follow the presentation of the main features of the papers.)

Part 1

Motor Fuels, J. B. Mcauley, Jr., Chrysler Corp.
Automobile Passenger-Car Motor-Oil Recommendations, W. H. Graves, Packard Motor Car Co.
Chassis Lubricants, H. C. Mougey, General Motors Corp.

Part 2

How the Automobile Industry Can Help Itself by Aiding the Petroleum Industry, A. Ludlow, Sun Oil Co.
Effect of Automotive Design on Vapor Lock, O. C. Bridgeman, U. S. Bureau of Standards.
What the Automotive Industry Can Do to Help the Petroleum Industry, J. F. Winchester, Standard Oil Co. of New Jersey.

8 P.M.

Annual Dinner—Grand Ballroom.

What the World Needs, "Senator" Edward Ford.

COMMITTEE MEETINGS

(Time scheduled subject to change)

Friday, October 20, 1933

Morning.

Private Dining Room No. 4.

10 a.m.—Committee on Disposal of Refinery Wastes.
Chairman, John S. Hess.
Secretary, D. V. Stroop.

Saturday, October 21, 1933

Morning.

Private Dining Room No. 3.

10 a.m.—Committee on Corrosion of Refinery Equipment.
Chairman, Walter Samans.
Secretary, D. V. Stroop.

Monday, October 23, 1933

Morning.

Room 435-A.

9:30 a.m.—Group 1—Committee on Measuring, Sampling, and Testing Natural Gasoline.
Chairman, S. S. Smith.

Room 439-A.

9:30 a.m.—Topical Committee on Allocation of Production.
Chairman, Fred E. Wood.

Room 440-A.

9:30 a.m.—Committee on the Standardization of Oil Field Belting (Tentative).
Chairman, A. H. Riney.
Secretary, L. B. Holland.

Room 444-A.

9:30 a.m.—Committee on the Standardization of Oil Field Boilers (Tentative).
Chairman, L. W. Voorhees.
Secretary, R. M. Ketchum.

Room 445-A.

9:30 a.m.—Committee on the Standardization of Standard Rigs and Derricks (Tentative).
Chairman, W. H. Meier.
Secretary, Hu M. Harris.

Room 423-A.

9:30 a.m.—Committee on the Standardization of Oil Country Tubular Goods.
Chairman, John R. Suman.
Secretary, Melbert Schwartz.

Room 430-A.

9:30 a.m.—Committee on the Standardization of Pumping Equipment and Engines.
Chairman, T. E. Swigart.
Secretary, H. N. Marsh.

Room 422-A.

9:30 a.m.—Committee on the Standardization of Steel Tanks for Oil Storage.
Chairman, R. W. Howe.
Secretary, W. C. Shutts.

Room 450-A.

9:30 a.m.—Subcommittee "B" on Natural-Gas Measurement.
Chairman, Don Sillers.

Private Dining Room No. 5.

9:30 a.m.—Subcommittee on Freight Classification.
Chairman, F. S. Hollands.

Private Dining Room No. 6

9:30 a.m.—Subcommittee on Car Service.
Chairman, J. M. O'Day.

North Assembly Room.

9:30 a.m.—Committee D-2 on Petroleum Products and Lubricants (A.S.T.M.).
Chairman, T. A. Boyd.
Secretary, R. P. Anderson.

Private Dining Room No. 3

10:00 a.m.—Committee on Fire Prevention in Refineries.
Chairman, C. E. Townsend.
Secretary, D. V. Stroop.

Private Dining Room No. 10

10:00 a.m.—Committee on Credit Practices.
Chairman, M. L. Gosney.
Secretary, J. A. McNally.

Private Dining Room No. 9.

10:00 a.m.—Committee on Uniform Methods of Oil Accounting.
Chairman, V. L. Elliott.

Private Dining Room No. 11.

10:00 a.m.—American Petroleum Industries Committee.
Chairman, Harry T. Klein.

North Assembly Room.

11:00 a.m.—Committee on Testing Methods and Specifications.
Chairman, K. G. Mackenzie.
Secretary, R. P. Anderson.

Afternoon

Private Dining Room No. 3.

2:00 p.m.—Committee on the Standardization of Refinery Equipment.
Chairman, A. E. Pew, Jr.
Secretary, R. P. Anderson.

West Ballroom.

2:00 p.m.—Committee on Railroad Transportation.
Chairman, Fayette B. Dow.
Secretary, D. V. Stroop.

Room 451-A.

2:00 p.m.—Group 2—Committee on Measuring, Sampling, and Testing Natural Gas.
Chairman, George P. Bunn.

Room 452-A.

2:00 p.m.—Advisory Committee on Fundamental Research on Occurrence and Recovery of Petroleum.
Chairman, H. H. Hill.
Secretary, C. A. Young.

Private Dining Room No. 1.

2:30 p.m.—Board of Directors.

(Continued on Next Page)

Evening.
West Ballroom.
8:00 p.m.—Main Committee on Measuring, Sampling, and Testing Natural Gas and Natural Gasoline.
Chairman, F. E. Rice.
Secretary, C. A. Young.
North Assembly Room.
8:00 p.m.—Central Committee on Refinery Technology.
Chairman, Walter Miller.
Secretary, R. P. Anderson.

Tuesday, October 24, 1933
Morning.
Room 440-A.
9:30 a.m.—Central Committee on Standardization.
Chairman, J. Edgar Pew.
Secretary, C. A. Young.
Room 444-A.
9:30 a.m.—Topical Committee on Development and Production Research.
Chairman, H. D. Wilde, Jr.
Room 445-A.
9:30 a.m.—Topical Committee on Drilling Practice.
Chairman, A. C. Rubel.
Room 439-A.
9:30 a.m.—Topical Committee on Production Practice.
Chairman, E. H. Griswold.
Room 453-A.
9:30 a.m.—Topical Committee on Production Records (Tentative).
Chairman, J. French Robinson.
Private Dining Room No. 4.
9:30 a.m.—Committee on Corrosion of Pipe Lines.
Chairman, C. R. Weidner.
Secretary, D. V. Stroop.
Private Dining Room No. 3.
9:30 a.m.—Subcommittee on the Standardization of Tank Trucks.
Chairman, J. F. Winchester.
Private Dining Room No. 11
10:00 a.m.—State Petroleum Industry Committee Chairmen and Secretaries.
Presiding, Baird H. Markham.
Private Dining Room No. 1.
12:00 noon—Board of Directors (Luncheon).

Afternoon.
Private Dining Room No. 5.
4:00 p.m.—Committee on Disposal of Production Wastes.
Chairman, M. E. Brook.
Secretary, D. V. Stroop.

Evening.
North Ballroom.
8:00 p.m.—Division of Production, General Committee.
Chairman, Charles F. Roeser.
Secretary, C. A. Young.
North Assembly Room.
8:00 p.m.—Division of Refining, General Committee.
Chairman, D. J. Moran.
Secretary, R. P. Anderson.
West Ballroom.
8:00 p.m.—Division of Marketing, General Committee.
Chairman, W. T. Holliday.
Assistant Secretary, J. A. McNally.
Room 452-A.
8:00 p.m.—Topical Committee on Well Spacing.
Chairman, T. V. Moore.

Wednesday, October 25, 1933
Afternoon.
Private Dining Room No. 6.
12:15 p.m.—Central Committee on District Activities (Luncheon).
Chairman, W. H. Meier.
Secretary, C. A. Young.
Private Dining Room No. 1.
2:00 p.m.—Board of Directors.
Private Dining Room No. 3.
2:00 p.m.—Committee on Fire Prevention in Marketing.
Chairman, C. A. Ellis.
Secretary, D. V. Stroop.
Room 430-A.
2:00 p.m.—Joint Meeting: Measuring, Sampling, and Testing Crude Oil.
Group 2—Technical Subcommittee on Methods of Test for Crude Oil.
Chairman, R. P. Anderson.
Group 3—Regional Subcommittee on Pipe Lines.
Chairman, E. L. Adams.
Private Dining Room No. 5.
4:00 p.m.—Committee on Disposal of Marketing Wastes.
Chairman, O. H. Gundlach.
Secretary, D. V. Stroop.
West Ballroom.
4:30 p.m.—Committee on Nomination, Division of Production.
Chairman, John R. Suman.
Secretary, C. A. Young.
West Ballroom.
4:30 p.m.—Committee on Nomination, Division of Refining.
Chairman, W. W. Lowe.
Secretary, R. P. Anderson.
West Ballroom.
4:30 p.m.—Committee on Nomination, Division of Marketing.
Chairman, E. J. Bullock.
Secretary, J. A. McNally.

Thursday, October 26, 1933
Morning.
Private Dining Room No. 4.
9:30 a.m.—Central Committee on Automotive Transportation.
Chairman, J. C. Bennett.
Secretary, D. V. Stroop.
Private Dining Room No. 1.
9:30 a.m.—Board of Directors.
Room 422-A.
9:30 a.m.—Central Committee on Pipe Line Transportation (Tentative).
Chairman, Clark H. Kountz.
Secretary, C. A. Young.
Private Dining Room No. 1.
12:00 noon—Executive Committee (Luncheon).
Private Dining Room No. 3.
12:00 noon—Advisory Committee on Public Relations (Luncheon).
Chairman, Northrup Clarey.
Secretary, Victor H. Scales.

Afternoon.
West Ballroom.
2:00 p.m.—Central Committee on Drilling and Production Practice.
Chairman, H. N. Marsh.
Secretary, C. A. Young.
Other Committee Meetings.
The following committees will meet at the time and place indicated to the members by the chairman:
Subcommittee on Railroad Equipment. Chairman, D. V. Stroop.
Subcommittee on Obsolete Cars. Chairman, A. C. Holmes.

Sixty-three Discoveries Credited to Geophysics

(Continued from Page 11)

ment of the Gulf Coast district as it is known today is proved very conclusively by the achievements to date. Although the history of the use of instruments dates back only to 1922, or about 11 years, there now are more fields and proven domes with discovery credited to geophysics than there are domes and fields found otherwise. In reality the history of instruments on the coast is much shorter than 11 years as in the earlier years little was known of the use and operation of the machines. It was not until 1924 that the first geophysical dome (Nash) was proved and it was from that year that the development had its real beginning.

It was stated previously that there are 115 proven fields and known salt domes in the Gulf Coast district proper. Of that number 63 are credited to geophysics. A complete list of these accompanies this article in tabular form. Although some of these undoubtedly would have been proved up eventually anyway, their existence having been suspected by surface indications or tell-tale signs of some kind, yet the use of instruments facilitated their discovery with the discovery tests being drilled on the geophysical findings. Nash, the first dome credited to geophysics, is an example of this. Its existence had been indicated by sulphur water in shallow wells and by surface elevation yet drilling previously to instrument locations had not located or drilled into the dome. In other instances, however, there are absolutely no indications on the surface of underlying domes or fields and these could not have been found without instruments unless by mere accident.

List of Discoveries

The accompanying list of geophysical discoveries includes only those which have been definitely proved to exist, this proof being the actual development of production, the drilling into cap rock or salt, or the encountering of showings of sufficient importance to indicate the existence of a field. Of the 63 discoveries, 45 have been proved productive. Of the 52 fields and domes not credited to geophysics, 44 have been productive, leaving eight proven domes on which no oil or gas has been found. It generally is assumed that, at some time, in some way, at some spot, production eventually will be obtained from all salt domes. It is of particular note that the geophysical prospects have been proved up with comparatively little exploration in contrast to the extensive wildcatting which took place before the opening of production on some of the older domes.

Geophysics now is so interwoven into Gulf Coast development methods that it is becoming difficult to list or segregate all the geophysical accomplishments. The general use of machines over the coast in detailing and outlining of the older domes and areas has been instrumental in the opening of additional sources of production and possibilities of development not ordinarily attributed to geophysical work. Drilling program in new fields opened without instruments have been mapped out on geophysical pictures subsequent to the bringing in of the discovery wells. At the same time there are many areas with geophysical pictures, although discovery wells, proving the pictures, were not drilled on the strength of them. In other words, what has been done and is being done in geophysical exploration cannot be limited to actual new field discoveries but of equal importance is the work of proving up and facilitating recovery of extensive additional untouched reserves around the older fields and domes.

ROCKY MOUNTAIN RUNS

Estimated daily average production for the week ending September 30 follows:

WYOMING

	Bbls.
Salt Creek	18,650
Big Muddy	1,799
Badger Basin	40
Byron-Garland	1,040
Byron-East	100
Dallas Derby	400
Dutton Creek	90
Elk Basin	540
Ferris	40
Frannie	210
Grass Creek	shut in
Greybull	10
Hamilton Dome	870
Hudson	200
LaBarge	920
Lance Creek	280
Lost Soldier	1,720
Mule Creek	shut in
Midway	70
Notches	shut in
Oregon Basin	1,080
Osage	610
Pilot Butte	30
Rex Lake	40
Rock River	1,240
South Casper	710
Poison Spider	240
Teapot	30
Warm Springs	shut in
Total	30,950

MONTANA

Buckley-Border	390
Cat Creek	710
Cut Bank	590
Dry Creek	420
Kevin-Sunburst	3,700
Lake Basin	50
Pondera	730
Total	6,590

COLORADO

Florence	200
Fort Collins and Wellington	560
Iles Dome	570
Moffat	620
Orchard	140
Rangely	70
Tow Creek	220
Total	2,380

NEW MEXICO

Artesia	590
Cooper area	70
Empire area	0
Eunice area	1,020
Getty Pool	0
Hobbs	33,530
Hogback	210
Hospah	shut in
Jal	1,670
Lea area	2,200
Jackson	940
Maljamar	200
Rattlesnake	870
Table Mesa	90
Total	41,390
Total all fields	81,310
Total previous week	81,610
Difference	300

Bureau of Mines Statistics for the Month of July, 1933

SUPPLY AND DEMAND OF ALL OILS
(Thousands of barrels of 42 U. S. gallons)

	July, 1933	June, 1933	July, 1932	Jan.-July, 1933	Jan.-July, 1932
NEW SUPPLY:					
Domestic production:					
Crude petroleum	84,387	82,841	66,310	517,617	463,942
Daily average	2,722	2,762	2,139	2,442	2,178
Natural gasoline	2,769	2,669	2,812	19,078	21,493
Benzol*	163	126	80	754	705
Total production	87,319	85,636	69,202	537,449	486,140
Daily average	2,817	2,855	2,232	2,535	2,282
Imports:					
Crude petroleum	3,411	2,143	1,525	19,673	33,769
Refined products	1,282	712	897	8,297	23,173
Total new supply, all oils	92,012	88,491	71,624	565,419	543,982
Daily average	2,968	2,950	2,310	2,667	2,550
Increase in stocks, all oils	5,963	1,384	1,104	17,446	†3,806
DEMAND:					
Total demand	86,049	87,107	70,520	547,979	546,388
Daily average	2,776	2,904	2,275	2,585	2,568
Exports:					
Crude petroleum	4,523	4,378	2,249	20,478	16,428
Refined products	7,443	5,093	4,928	40,981	48,451
Domestic demand:					
Motor fuel	34,458	37,710	30,924	214,392	214,530
Kerosene	2,041	3,115	1,854	20,991	18,565
Gas oil and fuel oil	25,966	25,343	20,461	182,198	181,339
Lubricants	1,630	1,646	1,011	9,393	11,514
Wax	107	136	58	661	567
Coke	861	596	708	5,193	4,919
Asphalt	1,431	1,310	1,309	6,169	6,466
Road oil	1,067	1,016	1,313	2,902	3,236
Still gas (production)	4,524	4,141	3,763	25,960	23,784
Miscellaneous	144	133	374	847	1,704
Losses and crude used as fuel	2,754	2,500	1,568	17,815	15,385
Total domestic demand	74,083	77,636	63,343	486,520	482,009
Daily average	2,390	2,588	2,042	2,295	2,263
STOCKS:					
Crude petroleum	350,894	348,197	358,355	350,894	358,355
Natural gasoline	3,722	3,763	3,895	3,722	3,895
Refined products	250,932	247,626	266,567	250,932	266,567
Total, all oils	605,549	599,586	628,817	605,549	628,817
Days' supply	218	206	276	234	245

*Based upon production of coke reported to coal division by those by-products coke plants that recover benzol products. †Decrease.

STOCKS OF CRUDE PETROLEUM
(Thousands of barrels of 42 U. S. gallons)

EAST OF CALIFORNIA:	July 31, 1933	June 30, 1933	July 31, 1932
At refineries by location:			
East Coast: Domestic	8,938	9,464	9,655
Foreign	2,891	3,299	9,149
Appalachian	2,233	2,334	2,216
Indiana, Illinois, Kentucky, Michigan	3,295	3,768	3,966
Oklahoma, Kansas, and Missouri	4,108	4,220	5,074
Texas: Inland	2,544	2,981	1,459
Gulf Coast: Domestic	6,303	6,315	6,846
Foreign	100	35	175
Louisiana Gulf Coast: Domestic	3,854	3,904	2,061
Foreign	710	728	1,895
Arkansas and Inland Louisiana	693	616	529
Rocky Mountain	12,635	12,556	1,586
Total	48,304	50,220	44,611
At refineries by origin:			
Pennsylvania Grade	2,048	2,187	2,121
Other Appalachian (inc. Kentucky)	500	571	770
Lima-N. E. Indiana-Michigan	245	225	212
Illinois-S. W. Indiana	143	137	116
N. Louisiana and Arkansas	2,296	2,376	1,389
West Texas and S. E. New Mexico	3,237	4,541	4,986
Oklahoma, Kansas, N. Texas, etc.	18,784	19,048	18,752
Gulf Coast	4,733	4,535	4,522
Rocky Mountain	12,617	12,538	1,524
Foreign	3,701	4,062	11,219
Total	48,304	50,220	44,611
Pipe line and tank farm:			
Pennsylvania Grade	4,091	4,267	4,929
Other Appalachian (inc. Kentucky)	740	780	895
Lima-N. E. Indiana-Michigan	759	718	1,265
Illinois-S. W. Indiana	11,096	11,240	11,103
N. Louisiana and Arkansas	10,819	10,968	14,279
West Texas and S. E. New Mexico	*29,833	29,579	31,123
Oklahoma, Kansas, N. Texas, etc.	*176,375	169,129	164,955
Gulf Coast	10,829	10,843	13,697
Rocky Mountain	15,123	15,516	25,243
Total	258,665	253,049	267,489
Total refinery, pipe line, and tank farm	306,969	303,260	312,100
Producers'	7,300	7,400	5,850
Total crude east of California	314,269	310,660	317,950
CALIFORNIA: Light	36,625	37,537	40,405
Total refinable crude in the United States	350,894	348,197	358,355

*Approximately 500,000 bbls. West Texas stocks transferred to Oklahoma stocks.

RECORD OF WELLS FOR IMPORTANT FLUSH FIELDS, JULY, 1933*

	Completions: Oil	Gas	Dry	Total initial prod. (bbls.)	Aver. initial prod. (bbls.)	Drilling July 31
Texas	313	6	125	(†)	(†)	680
East Texas	141	1	8	(†)	(†)	70
Gulf Coast	82	2	22	108,200	1,300	143
Conroe	48	...	1	80,300	1,700	37
West Texas	24	1	8	5,700	200	95
California	22	...	17	26,800	1,200	124
Kettleman Hills	5	...	...	10,800	2,100	10
Long Beach	1	...	...	200	200	26
Playa Del Rey	...	...	...	...	...	2
Oklahoma	31	7	21	18,700	600	250
Oklahoma County	5	...	...	7,100	1,400	17
Pottawatomie and Seminole Counties	6	...	2	33,900	1,500	37
New Mexico	3	...	3	1,900	600	46
Lea County (Hobbs)	2	...	...	1,800	900	4
Other states	179	62	86	48,500	200	919
Total United States	548	75	252	(†)	(†)	2,019

*From The Oil and Gas Journal and California office of American Petroleum Institute. †Not available.

SHIPMENTS OF MOTOR FUEL BY PIPE LINES
(Thousands of barrels in 42 U. S. gallons)

	July, 1933	June, 1933	July, 1932	Jan.-July, 1933	Jan.-July, 1932
Motor fuel turned into lines	3,488	3,209	2,254	20,730	16,347
Motor fuel delivered from lines	3,523	3,222	2,226	20,750	16,167
Shortage	11	14	5	36	33
Stocks in lines and working tanks end of month	1,142	1,188	1,109	1,142	1,109

SHIPMENTS FROM CALIFORNIA TO EASTERN PORTS IN UNITED STATES*
(Thousands of barrels in 42 U. S. gallons)

	July, 1933	June, 1933	July, 1932	Jan.-July, 1933	Jan.-July, 1932
Gasoline	1,618	1,027	934	6,552	5,467
Natural gasoline	.....	.....	.....	81	217
Kerosene	6	80	.....	877	131
Gas oil and Diesel oil	.....	.....	144	1,286	523
Fuel oil	.....	73	.....	801	.....
Lubricants	10	1	9	28	28
Asphalt	.....	.....	1	.....	6
Miscellaneous	21	1	15	141	55
Total	1,655	1,182	1,103	9,766	6,427

*Compiled by E. T. Knudsen of the San Francisco office of the Bureau of Mines.

NUMBER OF WELLS COMPLETED IN THE UNITED STATES*

	July, 1933	June, 1933	July, 1932	Jan.-July, 1933	Jan.-July, 1932
Oil	548	372	1,279	3,505	5,909
Gas	75	63	71	456	613
Dry	252	274	362	1,886	1,936
Total	875	709	1,712	5,847	8,458

*From The Oil and Gas Journal and California office of American Petroleum Institute.

RUNS TO STILLS AND OUTPUT OF REFINERIES, JULY, 1933
(Thousands of barrels of 42 U. S. gallons)

INPUT—	Crude oil: Domestic	Foreign	Total	Unfinished oils rerun	Natural gasoline	Total input
East Coast	11,257	3,489	14,746	378	51	15,175
Appalachian	3,146	.....	3,146	522	16	3,684
Ind., Ill., Ky., etc.	11,183	.....	11,183	386	113	11,682
Okla., Kans., Mo.	9,552	.....	9,552	306	397	10,255
Texas Inland	5,878	.....	5,878	90	261	6,229
Texas Gulf	13,622	63	13,685	270	225	14,180
Louisiana Gulf	3,637	78	3,715	1	24	3,740
Ark. and La. Inland	1,562	.....	1,562	368	33	1,963
Rocky Mountain	1,463	.....	1,463	101	58	1,622
California	14,605	.....	14,605	383	*582	15,570
Total	75,895	3,630	79,525	3,305	1,860	84,690

OUTPUT—	Gasoline	Kerosene	Gas oil and distillate fuels	Residual fuel oils	Lubricants	Wax (thous. of lbs.)
East Coast	5,975	833	1,215	4,095	621	16,800
Appalachian	1,714	235	255	482	411	5,320
Ind., Ill., Ky., etc.	5,996	529	834	1,753	155	1,960
Okla., Kans., Mo.	5,383	584	813	1,766	236	2,520
Texas Inland	2,987	305	381	1,779	20	.....
Texas Gulf	6,124	944	1,411	3,262	387	3,920
Louisiana Gulf	1,166	319	514	1,224	30	4,760
Ark. and La. Inland	711	67	168	522	6	.....
Rocky Mountain	801	51	43	218	3	840
California	5,719	405	1,662	6,471	96	.....
Total	†36,576	4,272	7,295	21,572	1,965	36,120

OUTPUT—Cont.	Coke (tons)	Asphalt (tons)	Road oil	Still gas	Miscellaneous	Unfinished products	Shortage
East Coast	19,600	141,500	157	909	31	378	25
Appalachian	2,400	8,000	32	252	32	73	118
Ind., Ill., Ky., etc.	57,600	50,500	336	967	15	378	146
Okla., Kans., Mo.	27,600	5,500	120	477	12	343	345
Texas Inland	6,000	.....	21	114	8	236	348
Texas Gulf	29,600	14,900	19	995	3	386	405
Louisiana Gulf	2,400	10,700	24	145	.....	147	82
Ark. and La. Inland	200	3,600	50	51	.....	306	51
Rocky Mountain	7,800	700	150	83	.....	183	45
California	400	29,200	137	531	24	321	141
Total	153,600	264,600	1,046	4,524	125	3,255	1,707

*Includes 105,000 bbls. run through pipe lines. †Includes 521,000 bbls. special naphthas.

CRACKING OPERATIONS

Fresh cracking stock charged to stills, bbls.	39,319,000
Gasoline produced by cracking, bbls.	17,012,000
Fuel oil produced by cracking, bbls.	14,596,000

STOCKS HELD BY REFINING COMPANIES, JULY 31, 1933
(Thousands of barrels of 42 U. S. gallons)

	Gasoline: At refineries	Bulk and pipe lines	Total	Kerosene	Gas oil and distillate fuels	Residual fuel oils
East Coast	5,084	9,507	14,591	2,081	4,363	4,020
Appalachian	1,356	1,030	2,386	234	521	266
Ind., Ill., Ky., etc.	4,489	2,893	7,387	600	2,172	2,282
Okla., Kans., Mo.	3,385	1,502	4,887	547	1,169	2,788
Texas Inland	2,008	163	2,171	160	524	2,671
Texas Gulf	4,457	216	4,673	1,979	3,079	4,017
Louisiana Gulf	1,270	286	1,556	536	1,763	1,010
Ark. and La. Inland	216	107	323	21	188	428
Rocky Mountain	1,186	.....	1,186	193	143	459
California	6,691	4,489	11,180	1,434	3,838	95,355
Total	30,142	20,193	50,340	7,785	17,760	113,276

	Lubricants	Wax (thous. of pounds): Crude scale	Refined	Total	Coke (tons)
East Coast	2,185	13,971	11,723	25,694	50,700
Appalachian	889	14,599	1,805	16,404	5,500
Ind., Ill., Ky., etc.	874	10,964	1,352	12,316	121,300
Okla., Kans., Mo.	472	1,176	1,009	2,185	143,600
Texas Inland	80	.....	32	32	119,700
Texas Gulf	1,663	2,172	9,468	11,640	452,500
Louisiana Gulf	64	4,251	2,607	6,858	49,100
Ark. and La. Inland	8	.....	.....	.....	200
Rocky Mountain	173	21,827	1,499	23,327	102,600
California	791	.....	.....	.....	103,900
Total	7,199	69,000	29,536	98,536	1,149,100

	Asphalt (tons)	Road oil	Miscellaneous products	Unfinished oils	Natural gasoline
East Coast	88,600	166	81	7,464	20
Appalachian	15,300	33	28	1,649	1
Ind., Ill., Ky., etc.	55,700	243	22	7,303	24
Okla., Kans., Mo.	4,200	185	16	4,347	20
Texas Inland	.....	35	7	1,143	4
Texas Gulf	7,700	54	9	11,335	129
Louisiana Gulf	22,200	13	.....	1,869	.....
Ark. and La. Inland	21,900	11	2	335	10
Rocky Mountain	2,500	341	7	2,270	1
California	55,000	296	207	*7,583	2,557
Total	278,100	1,377	379	45,288	2,766

*Includes 3,902,000 bbls. crude gasoline.

GASOLINE PRODUCTION BY THE VARIOUS METHODS, JULY, 1933

(Thousands of barrels of 42 U. S. gallons)

	Straightrun			Cracked			Nat. gaso.		Gasoline	
		Per cent			Per cent			Per cent		Per cent
	Total	(*)	(†)	Total	(*)	(†)	Total	(†)	Total	(*)
East Coast	2,949	20.0	49.4	2,975	20.2	49 8	51	0.8	5,975	40.2
Appalachian	828	26.3	48.3	870	27.7	50.8	16	.9	1,714	54.0
Ind., Ill., etc.	2,168	19.4	36.1	3,715	33.2	62.0	113	1.9	5,996	52.6
Okla., Kans., Mo.	2,673	28.0	49 6	2,313	24.2	43.0	397	7 4	5,383	52.2
Texas Inland	1,968	33.5	65.9	758	12.9	25.4	261	8.7	2,987	46 4
Texas Gulf	2,459	18.0	40 1	3,440	25.1	56.2	225	5.7	6,124	43.1
Louisiana Gulf	509	13.7	43.6	633	16.0	54.3	24	2 1	1,166	30.7
Ark. and La. Inland	404	26.0	56.8	274	17.7	38.5	33	4.7	711	43.7
Rocky Mountain	402	27.5	50 2	241	23.3	42.6	58	7.2	801	50 8
California	3,344	22.9	58.5	1,693	11.6	29.6	682	11.9	5,719	34.5
Total	17,704	22.3	48.4	17,012	21.4	46.5	1,860	5.1	36,576	43.7

*Per cent of crude run. †Per cent of total gasoline output.

PRODUCTION OF CRUDE PETROLEUM BY DISTRICTS

(Thousands of barrels of 42 U. S. gallons)

	July, 1933		June 1933		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1933	1932
Appalachian:						
Pennsylvania grade	1,787	58	1,761	59	11,779	12,972
Other (inc. Kentucky)	553	18	449	15	3,567	4,646
Lima-N. B. Ind.-Mich.	661	21	563	19	3,889	4,183
Ill.-S. W. Ind.	468	15	418	14	2,601	3,498
Mid-Continent:						
N. La. and Ark.	1,779	57	1,782	59	12,370	12,843
W. Tex.-S. E. New Mex.	6,251	202	5,733	191	41,664	45,727
Other (Okla., Kans., N. Tex., etc.)	49,128	1,585	50,082	1,670	292,019	234,815
Gulf Coast	7,370	238	6,431	214	41,657	29,139
Rocky Mountain	1,244	40	1,277	43	8,522	10,547
California	15,141	488	14,345	478	99,549	105,572
Total	84,387	2,722	82,841	2,762	517,617	463,942

INDICATED DOMESTIC DEMAND FOR CRUDE PETROLEUM

(Thousands of barrels of 42 U. S. gallons)

	July, 1933		June 1933		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1933	1932
Domestic petroleum by fields of origin:						
Appalachian:						
Pennsylvania grade	2,102	68	1,945	65	12,695	12,538
Other (inc. Kentucky)	666	21	468	15	3,850	4,859
Lima-N. E. Ind.-Mich.	601	19	569	19	4,164	4,525
Ill.-S. W. Ind.	597	19	500	17	2,678	2,199
Mid-Continent:						
N. La. and Ark.	1,967	63	1,769	59	13,146	16,009
W. Tex.-S. E. New Mex.	*7,310	236	5,299	176	44,534	49,189
Other (Okla., Kans., N. Tex., etc.)	*43,360	1,399	43,554	1,452	268,185	248,557
Gulf Coast	7,120	230	6,081	203	42,577	29,224
Rocky Mountain	1,553	50	1,429	48	8,535	8,850
California	15,589	503	14,640	488	96,615	104,938
Total demand	80,865	2,608	76,254	2,542	496,889	480,888
Exports	4,523	146	4,378	146	20,478	16,428
Domestic demand	76,342	2,462	71,876	2,396	476,411	464,460
Foreign petroleum	3,772	122	3,231	108	22,576	27,044
Total domestic demand	80,114	2,584	75,107	2,504	498,987	491,504

*Approximately 500,000 bbls. West Texas stock transferred to Oklahoma stocks.

RECEIPTS OF CRUDE PETROLEUM ON THE ATLANTIC SEABOARD

(Thousands of barrels of 42 U. S. gallons)

Domestic:	July, 1933	Foreign:	July, 1933
Pennsylvania grade	466	Venezuela	1,536
West Texas-S. E. New Mexico	2,010	Colombia	739
East Texas	3,306	Mexico	740
Other Mid-Continent	2,053	Other	80
Gulf Coast	2,917		
		Total	3,095
Total	10,752	Total receipts	13,847

COMPARATIVE ANALYSES

(Thousands of barrels of 42 U. S. gallons)

	July, 1933		June 1933		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1933	1932
CRUDE PETROLEUM:						
Runs to stills:						
Domestic	75,895	2,448	71,521	2,384	470,580	463,791
Foreign	3,630	117	3,098	103	21,845	26,822
Total	79,525	2,565	74,619	2,487	492,425	490,613
Imports	3,411	110	2,143	71	19,673	33,769
Exports	4,523	146	4,378	146	20,478	16,428
MOTOR FUEL:						
Production	37,242	1,201	35,876	1,196	232,798	237,401
Imports	1	.....	1	.....	7	7,698
Exports*	3,303	107	2,619	87	18,155	23,614
Stocks: Gasoline	50,340	.....	50,818	.....	50,340	58,286
Natural gasoline	3,723	.....	3,763	.....	3,723	3,895
Domestic demand	34,458	1,112	37,710	1,257	214,392	214,530
KEROSENE:						
Production	4,272	138	4,126	138	28,521	25,529
Imports	.....	.....	.....	.....	.....	10
Exports	850	27	368	12	4,719	6,273
Stocks	7,785	.....	6,404	.....	7,785	6,033
Domestic demand	2,041	66	3,115	104	20,991	18,565
GAS OIL AND FUEL OIL:						
Production	28,867	931	26,827	894	182,160	176,086
Transfers†	412	13	731	24	5,541	3,023
Imports	1,272	41	693	23	8,168	15,283
Exports	2,170	70	1,162	39	11,606	12,892
Stocks	131,036	.....	127,721	.....	131,036	136,017
Domestic Demand	25,066	809	25,343	845	182,198	181,339
Railroads (Class 1)‡	(§)	(§)	3,341	111	¶19,500	¶21,196
Bunker oil‖	2,817	91	3,179	106	19,841	23,306
Public utility power plants**	1,027	33	††897	30	5,206	3,736
Other	(§)	(§)	17,926	588	137,651	133,101
LUBRICANTS:						
Production	1,965	63	1,846	62	13,038	14,216
Imports	.....	.....	.....	.....	.....	11
Exports	870	28	633	21	4,821	4,207
Stocks	7,199	.....	7,734	.....	7,199	7,991
Domestic demand	1,630	53	1,646	55	9,393	11,514
WAX (thousands of pounds):						
Production	36,120	1,165	38,640	1,288	254,240	283,640
Imports	1,354	44	2,408	80	13,304	24,534
Exports	21,464	692	18,282	609	147,147	118,745
Stocks	98,536	.....	112,614	.....	98,536	202,073
Domestic demand	30,088	971	34,922	1,164	185,489	158,626
COKE (short tons):						
Production	153,600	4,955	154,400	5,147	939,800	1,037,600
Stocks	1,149,100	.....	1,185,400	.....	1,149,100	1,544,200
ASPHALT (short tons):						
Production	264,600	8,535	247,400	8,247	1,212,600	1,391 700
Imports (natural)	700	23	1,000	33	11,500	15,000
Stocks	278,100	.....	287,600	.....	278,100	356,300

*Includes benzol—696 bbls. in July, 1933. †Includes crude used as fuel and net transfers to fuel oil stocks. ‡Interstate Commerce Commission. §Not available. ¶January-June. ‖Laden on vessels engaged in foreign trade. **U. S. Geological Survey. ††Revised.

PRODUCTION OF CRUDE PETROLEUM BY STATES AND PRINCIPAL FIELDS

(Thousands of barrels of 42 U. S. gallons)

	July, 1933		June 1933		Jan.-July,	Jan.-July,
	Total	Dly. av.	Total	Dly. av.	1933	1932
Arkansas	1,004	32	1,030	34	6,678	7,030
California:						
Kettleman Hills	1,972	64	1,855	62	12,796	12,797
Long Beach	2,310	74	2,236	74	15,041	16,655
Santa Fe Springs	1,667	54	1,620	54	11,249	13,539
Rest of State	9,192	296	8,634	288	60,463	62,581
Total California	15,141	488	14,345	478	99,549	105,572
Colorado	83	3	77	3	564	737
Illinois	404	13	357	12	2,232	3,003
Indiana:						
Southwestern	64	2	61	2	369	495
Northeastern	1	.....	1	.....	7	19
Total Indiana	65	2	62	2	376	514
Kansas	4,073	131	3,486	116	23,766	19,977
Kentucky	422	14	325	11	2,614	3,581
Louisiana:						
Gulf Coast	1,331	43	1,207	40	8,097	6,480
Rest of State	775	25	752	25	5,692	5,813
Total Louisiana	2,106	68	1,959	65	13,789	12,293
Michigan	565	18	474	16	3,299	3,518
Montana	190	6	185	6	1,142	1,520
New Mexico	1,271	41	1,051	35	7,714	7,819
New York	250	8	256	9	1,739	2,135
Ohio:						
Central and Eastern	269	9	252	8	1,844	2,103
Northwestern	95	3	88	3	583	646
Total Ohio	364	12	340	11	2,427	2,749
Oklahoma:						
Oklahoma City	8,362	270	6,029	201	35,304	22,117
Seminole	4,048	131	3,423	114	23,501	26,150
Rest of State	6,109	197	6,055	202	41,461	44,422
Total Oklahoma	18,519	598	15,507	517	100,266	92,690
Pennsylvania	1,080	35	1,060	35	7,064	7,463
Tennessee	1	.....	1	.....	3	4
Texas:						
Gulf Coast	6,039	195	5,224	174	33,560	22,659
West Texas	5,018	162	4,724	157	34,164	38,139
East Texas	19,277	622	24,533	818	120,329	71,561
Rest of State	7,259	234	6,556	219	47,667	50,587
Total Texas	37,593	1,213	41,037	1,368	235,711	182,946
West Virginia	323	10	316	11	2,082	2,332
Wyoming:						
Salt Creek	581	19	569	19	4,175	4,818
Rest of State	352	11	404	14	2,397	3,241
Total Wyoming	933	30	973	33	6,572	8,059
Total United States	84,387	2,722	82,841	2,762	517,617	463,942

Chairmen of Marketing Committees Are Approved

(Continued from Page 8)

Florida—T. N. Asbury, Seaboard Oil Co., Jacksonville, Fla., chairman; John Downing, Standard Oil Co., Jacksonville, Fla., vice chairman.

Georgia—G. Everett Millican, Gulf Refining Co., Atlanta, Ga., chairman; R. E. Hodgson, Standard Oil Co., Atlanta, Ga., vice chairman.

Louisiana—J. A. Welch, Louisiana Oil Refining Corp., Shreveport, La., chairman; W. B. Rew, Magnolia Petroleum Co., Dallas, Tex., vice chairman.

Mississippi—M. H. Utley, Standard Oil Co. of Kentucky, Jackson, Miss., chairman; F. S. Cannon, Pan American Petroleum Corp., Jackson, Miss., vice chairman.

North Carolina—E. R. Burt, North Carolina Independent Oil Men's Association, Biscoe, N. C., chairman; C. C. Beasley, Pure Oil Co., Charlotte, N. C., vice chairman.

South Carolina—W. J. Keenan, Columbia Petroleum Co., Columbia, S. C., chairman; J. B. Love, Pure Oil Co., Charlotte, N. C., vice chairman.

Tennessee—W. D. Hudson, Tennessee Oil Men's Association, Nashville, Tenn., chairman; J. M. Lassing, Pure Oil Co., Nashville, Tenn., vice chairman.

Virginia—E. J. Schul, Virginia Oil Jobbers Association, Norfolk, Va., chairman; E. T. Lemmon, Standard Oil Co. of New Jersey, Richmond, Va., vice chairman.

Region No. 4

Kansas—J. A. Motter, Kansas Oil Men's Association, Wichita, Kans., chairman.

New Mexico—E. S. Karstedt, Continental Oil Co., Ponca City, Okla., chairman.

Oklahoma—W. A. Riley, Barnsdall Refineries, Inc., Tulsa, chairman; J. R. Atchinson, Oklahoma Petroleum Marketers Association, Oklahoma City, Okla., vice chairman.

Texas—Fred M. Lege, Jr., Magnolia Petroleum Co., Dallas, Tex., chairman; O. H. Carlisle, Gulf Refining Co., Houston, Tex., vice chairman.

Region No. 5

Colorado—W. E. Thomas, Navy Gas & Supply Co., Denver, Colo., chairman.

Montana—J. M. Anderson, Shell Oil Co., Missoula, Mont., chairman.

Utah—A. S. Brown, Utah Oil Refining Co., Salt Lake City, Utah, chairman.

Wyoming—George H. Goohs, Standard Oil Co., Cheyenne, Wyo., chairman.

Order on Payment of Rentals and Royalties

Secretary of the Interior Ickes has issued the following order covering payment of rentals and royalties under oil and gas leases and permits:

"To expedite collecting and accounting for rentals and royalties under the act of February 25, 1920 (41 Stat. 437), and other acts providing for the leasing of mineral lands, beginning October 1, 1933, remittances in payment of rentals and royalties under oil and gas leases and permits shall be made through the supervisors of oil and gas leasing operations; and rentals and royalties on coal, potash, sodium phosphate and other mining leases and permits shall be made through the district mining supervisors. The supervisors shall note payments on their records and promptly forward the remittances direct to the General Land Office, where receipts will be issued and the money accounted for and deposited in the treasury. Remittances shall be by check, draft, or money order drawn to the order of the commissioner of the General Land Office, and shall be accompanied by statements prepared by the payer showing the specific items of rentals or royalty the payments are intended to cover. Forms for this purpose will be provided by the Geological Survey.

"The General Land Office will maintain an accounting record of all rentals and royalties due and payments made and will be responsible for making collections, but a copy of each demand for payment shall be furnished the supervisor who reports the royalty.

"All regulations in conflict herewith are hereby modified accordingly."

The district east of the Rocky Mountains will make payment to the Tulsa office of the U. S. Geological Survey. P. O. Box 311. Rocky Mountain district to the U. S. Geological Survey at Casper, Wyo., and for the western district including California at Taft, Calif.

Anderson County Well May Be Only Gasser; Other Tests Proposed in Nearby Blocks

By L. E. BREDBERG

DALLAS, Tex., Oct. 2.—The Long Lake area of southwestern Anderson County continues to hold the spotlight in East Texas regardless of the fact that the test is now 178 feet in the Woodbine section and when tested on September 27 showed only gas, no oil having been encountered or having shown up on the former two tests or below the heavy gas producing sand formations.

This is said to be the first test drilled so far in the Woodbine sand section without showings of oil or water, and though the operators are carrying it on deeper coring is done at but a slow rate. Last reported depth was 5,360 feet, the formation reported as sand and sandy shale similar to the gas formations cored above which produced an estimated 20,000,000 to 40,000,000 feet of dry gas.

The test made on September 27 rated the well as a better gasser than shown on the previous test from 5,147-5,229½ feet. The latter test was made at 5,265 feet, and it was thoroughly believed that with the amount of saturations shown in the sand the well would prove an oiler on the latter test. In case salt water shows up on further coring the hole can be plugged back and a good gasser made from one or both of the gas sands which have been mudded off to allow deeper drilling.

Seven-inch casing was cemented at 5,148 feet, the hole being carried open below this point but 5-inch casing was trucked in to use if necessary, or if the owners consider it expedient to run it in carrying the well deeper. Pressure remains between 2,250 and 2,300 pounds.

Making only a gasser thus far the well has many guessing as to just what has taken place geologically in the area, and what the outcome of this or other tests will show. Trading cannot be said to have slackened but operators and companies are going ahead more slowly.

May Be Edge Well

If the Tide Water Oil Co.-Texas Seaboard Oil Co.'s No. 1 Monnig proves to be only a gasser it probably will be considered an edge well and the owners of the 24,000-acre block will make location for another test higher on the structure. Standard Oil Co. of Kansas is now moving in material on a location approximately 2 miles northeast, in the north end of the A. W. Johnson farm in the Simon Sanches Survey, and should be the second test to drill to the Woodbine giving a better insight into what may be expected of this area which has promised another Woodbine sand field in East Texas.

Two other tests have been proposed for nearby blocks, one over in Freestone County, the adjacent county to the west, but it is believed drilling on these blocks will not be carried out for some time, probably waiting on the Standard of Kansas test.

P. N. Wiggins, Jr., of Dallas, who with J. B. Daniels assembled the block for the Tide Water and Texas Seaboard Oil companies, also purchasing a large part of the royalty under the block, has assembled another block of approximately 15,000 acres in the northwest corner of Anderson County near Cayuga, and south and east of the test being drilled by Roeser in the C. Bobo Survey.

The block has been given a general working over with geophysical instruments, but is to be detailed more closely by geologists. A test will be drilled but location has not yet been announced. The bock includes and centers around the M. H. Johns, Samuel Edmondson, Samuel Snider, James Wilson, T. N. Jones, J. C. Collins, James Mitchell, P. Salinas, T. Smith, W. N. Watkins and Anderson County School Lands Surveys.

Gulf Production Co. holds a large block near Elhart, approximately 10 miles southeast of the Long Lake gasser, but nothing is known as to whether the company contemplates testing its block at this time.

Leon County

Shell Petroleum Corp. and others' No. 1 Beggs, in the John Carter Survey, Leon County, southwest of the Anderson County gasser, and on direct strike with it and the Boggy Creek Pool on the Anderson-Cherokee County line, holds renewed interest as it drills at 5,340 feet. This test is being drilled as a result of good Woodbine saturations in a former test on the Buffalo structure. Those showings, from 6,054-68 and 6,146-55 feet, yielded but slight encouragement and the test, on the Phillips farm in the A. Swayze Survey, was abandoned at a total depth of 6,300 feet. However, the companies holding unit interests in the block considered it advisable to drill a second test. The showings in the Beggs test led to further geological prospecting in Leon County and the resultant test by Ed W. Bateman on the A. C. Carlisle farm in the Mary Elam Survey, in the western part of the county, has been held up several weeks by a fishing job. Total depth is 5,957 feet.

Wildcats

The discovery of a large amount of gas in southwestern Anderson County will encourage exploration in the southern tier of counties.

Three wildcats in East Texas were given up this week as dry holes. Lee Timberlake's No. 2 Tidwell in the L. M. Rice Survey, Bowie County, was abandoned at 3,010 feet. Lone Star Gas Co.'s No. 1 B. B. Barron in the E. Mabry Survey, Limestone County, was abandoned at a total depth of 4,365 feet. Siam Oil Co.'s No. 1 J. K. Kleipp in the Richardson Survey, Navarro County, was abandoned at a total depth of 3,956 feet.

Completions and Locations

There were 75 wells completed this week, bringing the total number near 11,000. There were 99 locations staked, the rapid development program during the past two months continuing at the present time.

Total number of wells in the field may be segregated as follows: Longview area, 4,075; Joiner area, 3,353; Kilgore area, 3,409 wells, a total of 10,837 wells. However there have been 75 more wells completed since this report came out, which would boost the total to 10,912 wells. The 26 leading producing companies in the field have now brought their well density down to one well to 12 acres, the remainder having a well density of one to 8 acres. Atlantic Oil Producing Co., one of the larger producers, was the first of its class to drill one well to 10 acres on its leases.

Daily Average Production

The daily average production for the field for the period ending September 27 was placed at 476,620 bbls., distribution having surmounted this by over 41,800 bbls. per day, averaging better than 518,430 bbls. per day. There are 22 refineries shut down in the field, the remaining 33 taking only 53,000 bbls. per day for processing. Tank car shipments averaged 1,390 bbls. per day.

J. B. Sowell's No. 6 Luce, top sand 3,549 feet, initial production 75 bbls. per hour through open tubing, total depth 3,637 feet. Texas Co.'s No. 19 M. T. Cole, top sand 3,494 feet, initial production 80 bbls. per hour through open tubing, total depth 3,552 feet; No. 12 H. T. Elder, top sand 3,643 feet, initial production 79 bbls. per hour through open tubing, total depth 3,669 feet. U-Tex Oil Co.'s No. 6 M. T. Cole, top sand 3,528 feet, initial production 60 bbls. in one-half hour through open tubing, total depth 3,550 feet. Wolfe and Marine Production Co.'s No. 5 M. T. Cole, top sand 3,538 feet, initial production 45 bbls. in one-quarter hour through open tubing, total depth 3,549 feet.

North Rusk County

Atlantic Oil Producing Co.'s No. 14 Brightwell, top sand 3,592 feet, initial production 75 bbls. per hour through open tubing, total depth 3,616 feet. Humble Oil & Refining Co.'s No. 84 Crim, top sand 3,582 feet, initial production 97 bbls. per hour through three-quarters inch tubing choke, total depth 3,599 feet; No. 85 L. D. Crim, top sand 3,607 feet, initial production 75 bbls. per hour through open tubing, total depth 3,647 feet; No. 15-A S. S. Laird, top sand 3,663 feet, initial production 60 bbls. per hour through three-quarters inch tubing choke, total depth 3,731 feet; No. 16-B Sexton, top sand 3,640 feet, initial production no gauge, flowed 45 minutes then went dead, total depth 3,731 feet. Luling Oil & Gas Co.'s No. 4-A W. M. Brightwell, top sand 3,619 feet, initial production 65 bbls. per hour through three-quarters inch tubing choke, total depth 3,634 feet. C. L. McMahon's No. 8 Laird, top sand 3,615 feet, initial production 20 bbls. in one-half hour through open tubing, total depth 3,629 feet. Olson Brothers and Johnson's No. 7 J. S. Powers, top sand 3,723 feet, initial production 75 bbls. per hour through open tubing, total depth 3,725 feet. Overton Refining Co.'s No. 3 Morris, top sand 3,658 feet, initial production 20 bbls. per day swabbing, total depth 3,664 feet.

South Rusk County

Ajo Oil Co.'s No. 5 S. E. Sanders, top sand 3,707 feet, initial production 75 bbls. per hour through open tubing, total depth 3,748 feet. Bennett and Ryan's No. 2 M. Schuler, top sand 3,630 feet, initial production 75 bbls. per hour through open tubing, total depth 3,683 feet. East Texas Oil & Refining Co.'s No. 4 Barksdale, top sand 3,686 feet, initial production 22½ bbls. in one-quarter hour through tubing, total depth 3,711 feet. Falcon Oil Co.'s No. 10 T. O. Mason, top sand 3,636 feet, initial production 35 bbls. in one-quarter hour through open tubing, total depth 3,675 feet. Humble Oil & Refining Co.'s No. 18-A Blackwell, top sand 3,650 feet, initial production 96 bbls. per hour through open tubing, total depth 3,671 feet; No. 6 O. Blackwell, top sand 3,660 feet, initial production 114 bbls. per hour through 2-inch tubing, total depth 3,671 feet; No. 29-A M. and R. Kangerga, top sand 3,665 feet, initial production 76 bbls. per hour through open tubing, total depth 3,709 feet; No. 35-A Kangerga, top sand 3,653 feet, initial production 84 bbls. per hour through open tubing, total depth 3,694 feet; No. 11-B Kangerga, top sand 3,627 feet, initial production 84 bbls. per hour through open tubing, total depth 3,672 feet; No. 11 H. A. Piercy, top sand 3,727 feet, initial production 61 bbls. per hour through open tubing, total depth 3,777 feet; No. 23-A S. A. Plowman, top sand 3,675 feet, initial production 75 bbls. per hour through open tubing, total depth 3,735 feet; No. 29 W. L. Price, top sand 3,725 feet, initial production 88 bbls. per hour through open tubing, total depth 3,776 feet; No. 13-A J. H. Silvey, top sand 3,724 feet, initial production 88 bbls. per hour through open tubing, total depth 3,751 feet; No. 31-A R. E. L. Silvey, top sand 3,617 feet, initial production 60 bbls. per hour through open tubing, total depth 3,584 feet.

COMPLETIONS IN EAST TEXAS DISTRICT

North Gregg County

Arkansas Fuel Oil Co.'s No. 19 Burnside, top sand 3,473 feet, initial production 58 bbls. in one-half hour through tubing, total depth 3,498 feet; No. 20 Burnside, top sand 3,546 feet, initial production 117 bbls. per hour through open tubing, total depth 3,492 feet. Atlantic Oil Producing Co.'s No. 5 Barton, top sand 3,674 feet, initial production 85 bbls. per hour through open tubing, total depth 3,690 feet; No. 21-A Burnside, top sand 3,537 feet, initial production 82 bbls. per hour through open tubing, total depth 3,552 feet; No. 3 Foster, initial production 85 bbls. per hour through open tubing, total depth 3,612 feet; No. 46 Judge, top sand 3,513 feet, initial production 81 bbls. per hour through open tubing, total depth 3,535 feet; No. 53 Judge, top sand 3,505 feet, initial production 89 bbls. per hour through open

(Continued on Page 39)

East Central Texas Wildcats

Week Ending October 2

ANDERSON COUNTY

Company, well, farm name, section and block—	Remarks:
Tide Water Oil Co. and Seaboard Oil Co.'s No. 1 Long Lake Plantation, 3,700 ft. due S of S cor. of Tom Reeves estate, 97-ac. tract, Simon Sanches Sur.	Drlg. 5,325 ft.

BOWIE COUNTY

R. W. Lynn and W. R. Rolfe's No. 1 Mrs. R. D. Hart, 330 ft. out of NE cor. of Hart 20-ac. tract, 1 mile E of Nash, Thomas Price Sur.	Location.

FRANKLIN COUNTY

Van Emon et al's No. 1 O. S. Maxton, 910 varas W and 910 varas S of NE cor. of survey, John Brown Sur.	Derrick.

GREGG COUNTY

Arcadia Refining Co.'s No. 1 R. M. Wood, 100 ft. W of Republic's No. 1 Wood in Blk. No. 134, H. R. Hokit Sur.	Rig up.
Clover Leaf Petroleum Co.'s No. 1 M. T. Cole, 209 ft. from N line and center of E and W lines of survey, A. Parks Sur.	Derrick.

(Continued on Page 40)

Pool Opener in Ector County Is Drilling Ahead Looking Good for Only 100 or 150 Barrels

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., Oct. 2.—The fourth pool opener of Ector County, Broderick and Calvert's No. 1 E. F. Cowden in Section 25, Block 44, Township 2s, T.&P. Survey, continues to drill ahead looking good for only around 100 to 150 bbls. per day, heading intermittently. It is now below 4,180 feet.

This well is approximately 5 miles northeast of the Penn Pool and almost the same distance west of the Addis area, one of the most recently opened areas in the county. A gasser is located about midway between the Addis area and the new discovery, making the new well appear as a new pool opener instead of a possible extension to this or any other producing area in the county.

Humble Pipe Line Co., which recently laid a connecting line from the Penn Pool to connect with wells in the Addis area, thence extending farther north to the Cowden area in Ector County, is now preparing to lay 14 miles of 4-inch line to connect with the two Fuhrman Petroleum Co. wells to the north in Andrews County. These wells are good for around 100 to 200 bbls. each and have been without an outlet since their discovery, the first in December of 1930 and the second in May, 1932. Gravity of the oil in those wells is around 24 degrees, a much lower gravity than found in the Ector County areas, and also carrying a higher degree of sulphur contamination. Whether the company will extend its line a few miles farther to the north to connect with small producers in the Deep Rock area is not known. Those wells are now owned by Tripplehorn of Fort Worth who recently purchased the wells and equipment on the leases from the former owners.

Good Cowden Completion

Stanolind Oil & Gas Co.'s No. 3 Cowden in Section 34, Block 43, Township 1n, T.&P. Survey, has been completed for one of the best producers in the Cowden area. It made an initial production of 624 bbls. in 24 hours at a total depth of 4,265 feet without shooting. Pay was topped at 4,052 feet. An increase was logged at 4,052-75, 4,143-58 and 4,210 feet. It lies almost midway between the first two wells drilled by the company in this area.

Yates Field

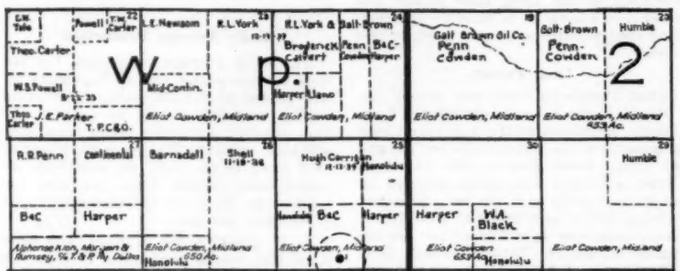
Vacancy strips in the heart of the Yates Field, Pecos County, won by Fred Turner, Jr. some few months ago, and on which he started drilling activities, has been acquired by the Mid-Kansas Oil & Gas Co. through purchase. This company formerly held this land, right to which was contested and won in the courts by Turner. Turner completed one good producer on one of the strips and the Mid-Kansas Oil & Gas Co. completed an offset. Nine locations recently staked by the two companies will probably not be drilled since the purchase has been consummated. There are 11 wells drilling on the strips and on offset locations, all of which will no doubt be completed.

Upton County

Gulf Production Co.'s No. 103 McElroy in Section 197, Block F, Upton County, Ordovician test which has had no difficulty in drilling to date, is now below 6,970 feet. Humble Oil & Refining Co.'s Ordovician test on the White and Baker ranch in Section 44, Block Z, T.C. Survey, Pecos County, is drilling below 4,970 feet. These tests were spudded about the same time, the latter encountering trouble with mud and suffering a fishing job which retarded drilling for some time.

Runnels County

There are five active tests in the McMillan area of Runnels County at the present time, Simmons' No. 1 H. E. Wade in the Norvell Travis Survey, approximately 2 miles northwest of the nearest producer, probably being the most interesting due to its location and the possibilities of extending the field that much farther. These wells produce from around 2,500 feet, the oil testing 44 degrees gravity without any sulphur content. The oil is going to nearby refineries which top it and sell the gasoline through local outlets. One small refinery is located at Ballinger and the other a short distance from the pool.



Broderick and Calvert's No. 1 Cowden, Section 25, Block 44, Township 2s, T. & P. Survey, another pool opener for Ector County, Texas

Howard County

Continental Oil Co.'s No. 5 Kloh, in Section 13, Block 33, Township 2s, T.& P. Survey, Howard County, is the first well in the area to respond to acid treatment. It was treated with 1,000 gallons of 50 per cent acid solution at 150 degrees, followed by 221 bbls. oil load. Before the treatment the well was making only 100 bbls. of oil and 20 bbls. of water and after the treatment it made 504 bbls. of oil with only 25 bbls. of water. Pay in the well was logged from 2,115-31 feet. Total depth is 2,151 feet.

Successful treatment of this well will no doubt lead to considerable more acid treatment in wells by other companies and producers operating in the pool.

Andrews County

Northern Andrews County is now getting a play south and west of the town of Florey on a geophysical high that has drawn considerable attention. Shell Petroleum Corp., Humble Oil & Refining Co., Snowden & McSweeney and others have purchased acreage in the area and there is a possibility of a test being drilled in the near future.

Irion County

P. A. Johnston of Dallas has completed a short 2-inch line from his good well near the town of Mertson in Irion County to a loading rack on the Santa Fe Railroad.

The Hendricks Pool, Winkler County, and Toborg-Tippett shallow pool, Pecos County, are not to suffer the 25 per cent production cut levied on all fields in Texas on September 8 by the Railroad Commission. Both areas are struggling under higher percentages of water in the wells making it inadvisable to slash the production to such a small allowable per well, the operators being unable to produce their wells if so limited. Many operators had shut down their wells in the Hendricks Pool, but since relief has been granted will put them back on production.

Gaines County

Ralph Gill of San Angelo is drilling a wildcat in Section 9, Block A-20, Public School Lands Survey, Gaines County. The test is to be drilled to 4,500 feet unless oil or gas is found in commercial quantities at a lesser depth.

WICHITA FALLS DISTRICT

There were 33 locations staked in this district during the week. Many wells had been shut down in the district until just recently when crude prices again reached a level at which the operators could afford to rig up and clean out their wells and put them on production.

PANHANDLE DISTRICT

A revival of an old form of treating wells has been used in the Panhandle district. Carbide has been tried in several wells, generating sufficient heat when mixed with water to melt the paraffin from the producing surface of the hole thereby allowing a greater flow of oil.

Skelly Oil Co.'s No. 1 Webb, in Section 61, Block 25, H.&G.N. Survey, Gray County, extends the Morse Pool approximately one-half mile southeast. Several other tests are drilling farther southeast and may extend this area another half mile when completed. It topped the pay from 2,474-80 feet and flowed 368 bbls. the first 8½ hours. Total depth is 2,480 feet.

Daily average production for the district for the week ending September 28 was 45,610 bbls., an increase of nearly 2,000 bbls. per day over the previous week. There are now 1,987 producing wells in the district.

Effective September 28 the new field allowable for the Pahandle is 43,727 bbls. Potential is reported to be 136,890 bbls. with the marginal oil not prorated, at 26,010 bbls. and 2,761 bbls. exempt on account of water content.

COMPLETIONS IN WEST TEXAS

Ector County

Stanolind Oil & Gas Co.'s No. 3 J. M. Cowden, top pay 4,052 feet, increase at 4,052-75, 4,143-58 and 4,210 feet, initial production 624 bbls. first 24 hours, total depth 4,265 feet.

Pecos County

Culbertson Brothers' No. 14 B. Monroe, dry and abandoned, total depth 575 feet. Mid-Kansas Oil & Gas Co.'s No. 20 Smith-Taylor, top pay 1,464 feet, initial production 402 bbls. per hour, total depth 1,700 feet.

Winkler County

Colonial Oil Co.'s No. 1 W. F. Scarborough, top pay 2,840 feet, initial production 40 bbls. per day, total depth 3,051 feet.

Ward County

Abell Brothers and others' No. 1 S. S. Owen and others, top pay 3,017 feet, initial production 277 bbls. flowing 24 hours, total depth 3,030 feet; No. 1 F. G. Smith, top pay 2,350 feet, initial production 65

Wildcat Operations in West Texas

Week Ending October 2

BREWSTER COUNTY

Company, well, farm name, section and block— Remarks:

C. M. Joiner's No. 1 McIntyre ..... T.D. 1,000 ft.

COKE COUNTY

C. D. Hagerty et al's No. 1 Gaston, in Joseph Young Sur. No. 11 ..... T.D. 710 ft.

CONCHO COUNTY

Mintex Oil Co.'s No. 2 Waring Estate, 660 ft. from N line, 150 feet from W line SW ¼ Sec. 2120, A. T. Robinson Sur. ..... Underreaming at 1,460 ft.

CRANE COUNTY

Loffland Bros.' No. 1 Tubbs, 1,334 ft. from N line, 1,320 ft. from W line, Sec. 9, Blk. 27-B, P.S.L. Sur. . Drlg. 3,240 ft.; show of oil 3,005 ft.

ECTOR COUNTY

Broderick & Calvert et al's No. 1 E. F. Cowden, 2,240 ft. from E line, 330 ft. from S line of Sec. 25, Blk. 44, Twp. 2s, T.&P. Sur. ..... Drlg. 4,302 ft.; T.P. 4,147 ft.; flowed 70 bbls. on 28th.

Landreth Production Co. & Llano Oil Co.'s No. 1 O. B. Holt, 660 ft. from S and W lines of N half of Sec. 20, P.S.L. Sur. ..... Drlg. 4,209 ft.; show of oil 4,160-15 ft.

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bbls. per day flowing, total depth 2,480 feet. A. Bradford's No. 1 B. Carson, top pay 2,115 feet, initial production 4,000,000 feet of gas, total depth 2,225 feet.

Jones County

Moutray Oil Co. and others' No. 1 M. Ray, dry and abandoned, total depth 2,321 feet. Roeser and Pendleton's No. 1 Minter, dry and abandoned, total depth 2,093 feet. T. M. Smart and others' No. 1 Reynolds, oil sand 1,825-33 feet, initial production 7 bbls., total depth 1,833 feet.

WICHITA FALLS COMPLETIONS

Archer County

Fain & McGaha's No. 3 Fain, oil sand 1,784-91½ feet, initial production 40 bbls. of oil and 10 bbls. of water, total depth 1,791½ feet. Huggins Oil Co.'s No. 4 Parkey, oil sand 1,716-22 feet, initial production 30 bbls., total depth 1,722 feet. Anderson and others' No. 4 Abercrombie, oil sand 1,006-08 feet, initial production 12 bbls., total depth 1,020 feet. Bridwell Oil Co.'s No. 1 Bridwell, dry and abandoned, total edpth 1,065 feet; No. 1 Falls, sandy lime 1,113-26 feet, initial production 15 bbls., total depth 1,126 feet. F. P. Cullum's No. 6 Falls-Ellis, sandy lime 1,129-52 feet, initial production 70 bbls., total depth 1,153 feet; No. 9 Falls-Ellis, sandy lime 1,128-51 feet, initial production 12 to 15 bbls. swabbing, total depth 1,151 feet. R. P. Dorian's No. 1 Andrews, oil sand 889-96 feet, initial production 6 bbls., total depth 910 feet.

W. B. Hamilton's No. 3 Abercrombie, sandy lime 1,143-55 feet, initial production 75 bbls., total depth 1,155 feet; No. 4 Abercrombie, sandy lime 1,178-88 feet, initial production 250 bbls., total depth 1,188 feet; No. 8 Abercrombie, sandy lime 1,128-33 feet, initial production 75 bbls., total depth 1,133 feet; No. 2 Ikard, sandy lime 1,135-43 feet, initial production 150 bbls., total depth 1,143 feet; No. 2 Ikard, sandy lime 1,169-77 feet, initial production 500 bbls., total depth 1,177 feet. King & Krahenbuhl's No. 1 Sheckell, sandy lime 1,178-83 feet, initial production 200 bbls., total depth 1,183 feet. Perkins & Cullum's No. 4 Falls-Hanszen, sandy lime 1,119-39 feet, shot with 90 quarts, initial production 50 bbls., total depth 1,139 feet. Petroleum Producers Co.'s No. 3 Richardson, oil sand 1,128-34 feet, initial production 50 bbls., total depth 1,134 feet. S. V. White's No. 1 Portwood, dry and abandoned, total depth 1,407 feet.

Clay County

Gay Hammond and others' No. 1 Meyers, dry and abandoned, total depth 3,370 feet.

Jack County

Brazos River Gas Co.'s No. 1 Tex-Clayton oil sand 2,898-2,914 feet, initial production 138 bbls., total depth 2,914 feet. B. O. Minnick's No. 1 Hanna, dry and abandoned, total depth 380 feet. Root Drilling Co.'s No. 4 Coeman-Leach, dry and abandoned, total depth 570 feet. LeRay Slusher's No. 1 Rollins, dry and abandoned, total depth 610 feet.

Montague County

Seitz, Comegys and others' No. 1 Hott, oil sand 1,611-16 feet, initial production 94 bbls., total depth 1,616 feet.

Wichita County

William Clark's No. 3 Overby, oil sand 1,781-34 feet, initial production 6 bbls., total depth 1,784 feet; No. 4 Overby, oil sand 1,241-48 feet, initial production 12 bbls., total depth 1,248 feet.

Young County

Brazelton and others' No. 9 Tsack, dry and abandoned, total depth 665 feet. Campbell & Underwood's No. 5 Campbell, dry and abandoned, total depth 911 feet. Petroleum Producers' No. 4 Belknap, oil sand 673-85 feet, initial production 100 bbls., total depth 685 feet. W. F. Powell's No. 1 Casey, dry and abandoned, total depth 895 feet. H. Stine's No. 1 Burns, dry and abandoned, total depth 805 feet. Westheimer & Daube's No. 11 Larimore, dry and abandoned, total depth 712 feet. Wheeler & Brashear's No. 2 Jeffery, dry and abandoned, total depth 840 feet. White & Duncan's No. 1 Montgomery, dry and abandoned, total depth 740 feet.

Wilbarger County

Easter Oil Co.'s No. 1 Waggoner, dry and abandoned, total depth 2,806 feet. Fain & McGaha's No. 1 Waggoner, dry and abandoned, total depth 1,984 feet. Phillips Petroleum Co.'s No. 3 Waggoner, oil sand 2,544-55 feet, initial production 126 bbls., total depth 2,570 feet; No. 1 Waggoner, oil sand 2,533-41 feet, initial production 100 bbls., total depth 2,541 feet. Texas Co.'s No. 7 Waggoner, oil sand 2,384-95 feet, initial production 24 bbls., total depth 2,395 feet.

COMPLETIONS IN RANGER DISTRICT

Brown County

D. R. Bailey and others' No. 1 W. R. Chambers, dry and abandoned, total depth 1,300 feet. S. B. Owens No. 7 Lynch, oil sand 1,284-1,307 feet, shot 5 quarts, initial production 10 bbls., total depth 1,307 feet.

Coleman County

C. B. Welsh's No. 1 J. W. Brown, dry and abandoned, total depth 805 feet. Don Dellon and others' No 1 Aldridge, dry and abandoned, total depth 400 feet.

Palo Pinto County

O. P. Coffin's No. 1 W. H. Wright, dry and abandoned, total depth 715 feet. T. B. Spence and others' No. 1 Wheeler, temporarily abandoned. Britton and Gordon's No. 4 Strawn Coal Co., dry and abandoned, total depth 3,064 feet. W. K. Gordon's No. 1 J. F. Butler, dry and abandoned, total depth 3,365 feet.

Shackelford County

Callihan & Beack's No. 5 E. A. Jeter, oil sand 1,178-82 feet, initial production 7 bbls., total depth 1,182 feet. J. L. Douglas' No. 8 Carter, oil sand 627-28½ feet, initial production 30 bbls., total depth 628½ feet. J. L. Douglas' No. 9 Carter, oil sand 629-31 feet, initial production 20 bbls., total depth 631 feet. Jones and others' No. 6 Dodson, show oil 652-59 feet, initial production 1½ bbls., total depth 657 feet. W. F. Snebold's No. 2 Spears, show oil 708-13 feet, initial production 75 bbls., total depth 716 feet. Union Oil & Mineral Co.'s No. 2 Carter, show oil 636-39½ feet, initial production 50 bbls., total depth 639½ feet. Union Oil Co.'s No. 3 Carter, dry and abandoned, total depth 696 feet.

COMPLETIONS IN PANHANDLE

Carson County

American Refining Co.'s No. 11 Burnett, location abandoned; No. 12 Burnett, location abandoned.

Gray County

Bell Oil & Gas Co.'s No. 1 Webb, shot from 2,520-70 feet, tested 135 bbls., total depth 2,570 feet. British American Oil Co.'s No. 4 Phillips, shot 90 quarts from 3,218-30 feet, initial production 230 bbls. on pump, total depth 3,080 feet. Danciger Oil & Refining Co.'s No. 10 Powell-Brown, pay 2,878-95 feet, initial production 78 bbls., total depth 2,898 feet. Skelly Oil Co.'s No. 4 Vulcans, shot 200 quarts from 3,201-81 feet, initial production 300 bbls., total depth 3,285 feet. Texas Co.'s No. 6 Combs-Worley, pay 3,018-32 feet, initial production 100 bbls., total depth 3,232 feet. Wilcox Oil & Gas Co.'s No. 23 Combs-Worley, pay 2,961-98 feet, initial production 335 bbls., total depth 3,048 feet.

Wheeler County

Mid-Kansas Oil & Gas Co.'s No. 1 Huselby, initial production 157 bbls. pumping, total depth 2,435 feet. Skelly Oil Co.'s No. 1 Huselby, pay 2,430-35 feet, initial production 306 bbls., total depth 2,441 feet.

Hutchinson County

Huber Petroleum Co.'s No. 2 Johnson, pay 3,035-59 feet, initial production on gas lift 569 bbls. on five-day proration test, total depth 3,059 feet. Stanolind Oil & Gas Co.'s No. 4 Ware, shot 210 quarts from 3,050-3,135 feet, initial production 214 bbls., total depth 3,140 feet.

Moore County

Canadian Gas Co.'s No. 2 Perkins, total depth 3,500 feet, plugged back to 2,770 feet, initial production 54,000,000 feet of gas.

East Texas Fields

(Continued from Page 37)

tubing, total depth 3,535 feet; No. 54 Judge, top sand 3,504 feet, initial production 79 bbls. per hour through open tubing, total depth 3,532 feet; No. 55 Judge, top sand 3,504 feet, initial production 81 bbls. per hour through open tubing, total depth 3,535 feet; No. 56 Judge, top sand 3,508 feet, initial production 86 bbls. per hour through open tubing, total depth 3,534 feet; No. 9 T. W. Lee, top sand 3,648 feet, initial production 82 bbls. per hour through open tubing, total depth 3,700 feet. Atlantic and Stanolind Oil & Gas Co.'s No. 9 Fishburn, top sand 3,494 feet; initial production 82 bbls. per hour through open tubing, total depth 3,530 feet. Atlantic and Sun Oil Co.'s No. 38 Hays, top sand 3,521 feet, initial production 86 bbls. per hour through open tubing, total depth 3,557 feet; No. 40 Hays, top sand 3,520 feet, initial production 80 bbls. per hour through open tubing, total depth 3,573 feet; No. 43 Hays, top sand 3,491 feet, initial production 86 bbls. per hour through open tubing, total depth 3,520 feet.

Gulf Production Co.'s No. 44 Judge, top sand 3,519 feet, initial production 80 bbls. per hour through open tubing, total depth 3,549 feet. Heyser & Heard's No. 4 L. G. Tuttle, top sand 3,507 feet, initial production 100 bbls. per hour through open tubing, total depth 3,532 feet. Humble Oil & Refining Co.'s No. 14 Harris, top sand 3,363 feet, initial production 16 bbls. in one-quarter hour through open tubing, total depth 3,518 feet; No. 22 W. R. Hughes, top sand 3,669 feet, initial production 64 bbls. per hour through three-quarters inch tubing choke, total depth 3,690 feet. Lesh & McCall's No. 5 M. Young, top sand 3,520 feet, initial production 100 bbls. per hour through open tubing, total depth 3,773 feet. Sells Petroleum Co.'s No. 6 Fisher, top sand 3,592 feet, initial production 85 bbls. per hour through open tubing, total depth 3,672 feet. Snowden & McSweeney's No. 8 M. Bonner, top sand 3,618 feet, initial production 90 bbls. per hour through open tubing, total depth 3,633 feet. Stanolind-Simms and Peachblossom Oil Co.'s No. 8 J. W. Akin, top sand 3,533 feet, initial production 21 bbls. in one-quarter hour through tubing, total depth 3,625 feet. Sun Oil Co.'s No. 9 Satterwhite, top sand 3,572 feet, initial production 12 bbls. in one-quarter hour through tubing choke, total depth 3,676 feet. A. W. Tarrant's No. 1 Sabine River, top sand 3,566 feet, initial production 50 bbls. in 40 minutes, total depth 3,570 feet. Yount Lee Oil Co.'s No. 3 A. A. Castleberry, top sand 3,595 feet, initial production 12½ bbls. per hour swabbing, total depth 3,615 feet.

South Gregg County

Dearing & McBride's No. 2 Dixon, top sand 3,518 feet, initial production 30 bbls. per hour through tubing, total depth 3,625 feet. Gulf Production Co.'s No. 6 S. G. Andrews, top sand 3,569 feet, initial production 72 bbls. per hour through tubing, total depth 3,590 feet. Humble Oil & Refining Co.'s No. 12 J. A. Knowles, top sand 3,573 feet, initial production 45 bbls. per hour through open tubing, total depth 3,641 feet. Island Oil Co.'s No. 3 J. A. Knowles, top sand 3,595 feet, initial production 70 bbls. per hour through open tubing, total depth 3,615 feet. Magnolia Petroleum Co.'s No. 7 Cole, top sand 3,572 feet, initial production 80 bbls. per hour through open tubing, total depth 3,535 feet. Rhoads Drilling Co.'s No. 20 Sabine River, top sand 3,505 feet, initial production 50 bbls. in one-half hour through open tubing, total depth 3,535 feet.

H. L. Hunt Production Co.'s No. 3-A Bradford, top sand 3,520 feet, initial production 20 bbls. per day pumping, total depth 3,629 feet; No. 6 Thrash, top sand 3,767 feet, initial production 45 bbls. per hour through open tubing, total depth 3,800 feet. Mid-Kansas Oil & Gas Co.'s No. 16 S. H. Moores, top sand 3,635 feet, initial production 68 bbls. per hour through open tubing, total depth 3,704 feet; No. 3 Rollins, top sand 3,645 feet, initial production 70 bbls. per hour through open tubing, total depth 3,673 feet. Retsal Drilling Co.'s No. 6 J. T. Brown, top sand 3,689 feet, initial production 75 bbls. per hour through open tubing, total depth 3,740 feet. Houghton Corp.'s No. 2 W. E. Wiley, top sand 3,602 feet, initial production 15 bbls. in one-half hour through open tubing, total depth 3,665 feet. Stanolind Oil & Gas Co.'s No. 5-B H. Schuler, top sand 3,628 feet, initial production 27 bbls. in 35 minutes through open tubing, total depth 3,676 feet. Texas Co.'s No. 6 J. W. Turner, top sand 3,685 feet, initial production 60 bbls. per hour through open tubing, total depth 3,790 feet. Venable & McClanahan's No. 15 J. A. Birdwell, top sand 3,610 feet, initial production 75 bbls. per hour through open tubing, total depth 3,649 feet.

Smith County

Manahan Oil Co.'s No. 2 S. S. Cook, top sand 3,742 feet, initial production 74 bbls. per hour through open tubing, total depth 3,748 feet.

Upshur County

Cranfill & Reynolds' No. 7 L. Graves, top sand 3,685 feet, initial production 13 bbls. per hour flowing by heads, total depth 3,688 feet. Humble Oil & Refining Co.'s No. 11 G. W. Johnson, top sand 3,686 feet, initial production 55 bbls. per hour through open tubing, total depth 3,712 feet. Mudge Oil Co.'s No. 11-A J. W. Free, top sand 3,630 feet, initial production 80 bbls. per hour through open tubing, total depth 3,680 feet. Lewis Sikes' No. 3 Moyer, oil sand 3,606 feet, initial production 60 bbls. per hour through open tubing, total depth 3,655 feet. Steen Drilling Co.'s No. 8 Lodin, top sand 3,656 feet, initial production 170 bbls. per hour through open tubing, total depth 3,700 feet.

WILDCAT COMPLETIONS

Bowie County

Lee Timberlake's No. 2 Tidwell, dry and abandoned, total depth 3,010 feet; L. M. Rice Survey.

Limestone County

Lone Star Gas Co.'s No. 1 B. B. Banon, top Austin chalk 2,390 feet, base 2,805 feet, top lower Taylor 3,210 feet, top Woodbine sand 3,042 feet, dry and abandoned, total depth 4,365 feet; E. Mabry Survey.

Navarro County

Siam Oil Co.'s No. 1 J. K. Kleipp, top Pecan gap 2,155 feet, base 2,312 feet, top Austin chalk 3,155 feet, base 3,467 feet, top Woodbine sand 3,956 feet, dry and abandoned; Jacob Richardson Survey.

GASOLINE INQUIRY ASKED

OTTAWA, Ontario, Oct. 2.—F. A. McGregor, registrar at Ottawa under the Combines Investigation Act, has received a petition from Mayor David Croll and others of Windsor, asking an investigation into Canadian gasoline prices. The petitioners allege a combine in the gasoline industry. In 1932 an agitation in regard to Canadian gasoline prices led to an investigation of the industry by a special committee of the federal House of Commons. This committee found that the refiners were operating on a narrow margin of profit and that there was no evidence of a combine. Gasoline prices throughout the dominion have been increased recently as a result of the general rise in crude oil prices, following adoption in the United States of the NRA program.

East Central Texas Wildcats

(Continued from Page 37)

Cranfill & Reynolds' No. 2 Lee, 3,950 ft. from S line and 3,280 ft. from N line of survey, John Ruddle Sur. ..... Drlg. 2,800 ft.

Day and Armstrong's No. 2 E. L. Walker, 300 ft. from N line and 2,300 ft. from E line of survey, M. Dillard Sur. ..... Running tubing; T.D. 3,606 ft.

Elliott et al's No. 1 Benson, 175 ft. from S line and center E and W lines of tract, W. P. Chisum Sur. ..... Location.

Lonnie Glasscock's No. 1 Whately, 1,100 ft. from S line and 200 ft. from W line of survey, William Robinson Sur. ..... Set csg.; T.D. 3,551 ft.

Magnolia Petroleum Co.'s No. 6 Clem Jones, 4,710 ft. from S line and 870 ft. from W line of survey, G. W. Hooper Sur. ..... Location.

J. S. Nelson et al's No. 1 Negro Lodge, 3,880 ft. from S line and 4,710 ft. from W line of survey, M. V. Winkle Sur. ..... Rig up.

Republic Production Co.'s No. 3 Scroggins, 330 ft. from N and E lines of survey, W. A. Elliott Sur. ..... Waiting on cmt. to set 3,680 ft.

Sneed et al's No. 3 G. Davis, 175 ft. from S line and 5,980 ft. from E line of survey, W. P. Chisum Sur. ..... Drlg. 3,320 ft.

Sun Oil Co.'s No. 5 J. T. Elder, 330 ft. from W line of lease and 660 ft. S of No. 4, John Wilkerson Sur. ..... Set csg.; T.D. 3,495 ft.

A. W. Tarrant's No. 2 Sabine River, Tract No. 1, 430 ft. W and 540 ft. N of SE cor. of M. Dillard Sur. .. Derrick foundation.

S. K. Vierson's No. 4-A Andy Givens, 680 ft. from S line and 134 ft. from E line of survey, R. W. Smith Sur. ..... Location.

Western State Royalty Co.'s No. 2 Doby, 4,980 ft. from N line and 5,300 ft. from E line of survey, Castleberry Sur. ..... Drlg. 2,850 ft.

HENDERSON COUNTY

Campbell and Champlin's No. 1 R. S. Ansley, 108 varas S and 623 varas W of NE cor. of lease, 6 miles SE of Buffalo, N. H. Thompson Sur. ..... Derrick.

McElreath and Suggett et al's No. 1 Ferguson, 330 ft. out of most southerly NW cor. of 252.8-ac. tract, William P. Wyche Sur. ..... Drilled to 4,195 ft.; bailed dry; drlg. deeper to test.

Roeser & Pendleton's No. 1 L. R. Billett, 330 ft. from N line and 2,310 ft. from E line of survey, Cecil Bobs Sur. ..... S.D. 4,306 ft.

LEON COUNTY

Bateman et al's No. 1 A. C. Carlyle, 150 ft. out of NE cor. of survey, Mary Elem Sur. ..... T.D. 5,959 ft.; fishing for drill stem.

Shell Petroleum Corp.'s No. 1 Beggs, center of 123.5-ac. tract, John Carter Sur. ..... Drlg. 5,151 ft.

MORRIS COUNTY

Argo and Key's No. 1 Hall, 330 ft. from NW cor. of survey, 3 miles NE of Dangerfield, L. Jordan Sur. ..... Derrick.

RUSK COUNTY

Arcadia Refining Co.'s No. 2 Griffin and Barnes, 6,950 ft. from S line and 150 ft. from E line of survey, J. B. De Cadena Sur. ..... Derrick and moving in.

Dearing et al's No. 1 McDavid, 1,120 ft. from N line and 1,500 ft. from W line of survey, T. H. Smith Sur. ..... Rig up.

East Texas Oil & Refining Co.'s No. 2 F. Barksdale, 1,900 ft. from N line and 3,000 ft. from E line of survey, M. J. Pru Sur. ..... Drlg. 2,875 ft.

East Texas Oil & Refining Co.'s No. 3 Ras Pool, 3,490 ft. from N line and 2,670 ft. from E line of survey, M. J. Pru Sur. ..... Drlg. 3,070 ft.

East Texas Refining Co.'s No. 10 D. Wills, 40 ft. W and 306 ft. S of SE cor. of Stanolind Beall lease, W. P. Chisum Sur. ..... Lost hole; Skidded 50 ft. W.

East Texas Refining Co.'s No. 6 C. H. Grissom, 5,510 ft. from S line and 3,300 ft. from W line of survey, F. Cordova Sur. ..... Waiting on cmt. to set 3,641 ft.

Farrell Drilling Co.'s No. 2 W. M. Hammett, 330 ft. out of most northerly NW cor. of survey, Walker Pettit Sur. ..... Top sand 3,660 ft.; T.D. 3,669 ft.

Gulf Production Co.'s No. 2 W. B. Perry, 2,410 ft. from N line and 990 ft. from W line of survey, I. Hemby Sur. ..... Drlg. 2,720 ft.

Jordan & Ramsey's No. 1 L. W. Prior, 830 ft. from N line and 607 ft. from E line of 53-ac. lease, Walker Pettit Sur. ..... Waiting on csg.; T.D. 3,646 ft.

Walker Murray et al's No. 1 W. H. Arnold, 330 ft. from S and W lines of 50-ac. tract, Levi N. Sparks Sur. ..... Fishing; T.D. 3,722 ft.

O'Hearn Oil Co.'s No. 4 M. M. McMillian, 1,380 ft. from N line and 1,890 ft. from W line of survey, T. J. Martin Sur. ..... Drlg. 3,540 ft.

George F. Hudson's No. 1-A Phillips, 30 ft. NE of No. 1, 3 miles E of Minden, N. Villareal Sur. ..... Drlg. 1,250 ft.

Hunt Production Co.'s No. 2 B. F. Maxwell, 820 ft. from N line and 2,510 ft. from W line of survey, R. H. Penny Sur. ..... Rig up and S.D.

McDonald Bros.' No. 2-A Cora Hannah, 7,880 ft. from N line and 3,580 ft. from E line of survey, J. B. De Cadena Sur. ..... Drlg. 2,710 ft.

R. J. McMurray et al's No. 4 A. D. Blackwell, 1,490 ft. from N line and 150 ft. from W line of survey, M. J. Pru Sur. ..... Drlg. 2,996 ft.

P. & A. Oil Co.'s No. 2 Brightwell, 700 ft. from N line and 1,820 ft. from E line of survey, R. W. Smith Sur. ..... Fishing 3,030 ft.

Patterson Drlg. Co.'s No. 3 Brock Estate, 2,320 ft. from N line and 100 ft. from E line of survey, R. W. Smith Sur. ..... Derrick.

Texas Co.'s No. 5 J. W. Turner, 955 ft. from S line and 330 ft. from W line of lease and survey, J. M. Scott Sur. ..... Drlg. 2,720 ft.

SMITH COUNTY

Long Drilling Co.'s No. 3 G. A. Turner, D. W. Campbell Sur. ..... Drlg. 3,173 ft.

Alex McCutcheon's No. 4 Stone, 890 ft. from N line and 960 ft. from W line of survey, D. Shaw Sur. ..... Derrick.

Gant and Wagner's No. 3 Stone, 300 ft. from N line and 970 ft. from W line of survey, D. Shaw Sur. ..... Drlg. 3,688 ft.

Stanley Lewis and Suni's No. 2 T. O. Wright, 1,050 ft. from N line and 1,280 ft. from E line of survey, J. Vargas Sur. ..... Drlg. 3,100 ft.

W. L. Sessions' No. 5 Stone, 1,000 ft. from S line and 910 ft. from W line of survey, D. Shaw Sur. ..... Location.

Sutton and Hawkins' No. 4 Church Lot, 70 ft. from N line and 1,880 ft. from E line of survey, J. Jordan Sur. ..... Running tubing; T.D. 3,805 ft.

UPSHUR COUNTY

W. V. Greer's No. 1 A. B. Mackey, 2,409 ft. from N line and 4,080 ft. from E line of survey, H. Pineda Sur. ..... S.D. 3,733 ft.

Magnolia Petroleum Co.'s No. 2 C. Brooks, 330 ft. from S and W lines of 50-ac. tract, J. F. Davis Sur. ..... Moving in.

Reynolds et al's No. 3 Miller, 670 ft. from N line and 2,100 ft. from E line of survey, D. Ferguson Sur. ..... Top sand 3,745 ft.

Skelly Oil Co.'s No. 4 J. W. Free, 2,020 ft. from N line and 5,350 ft. from E line of survey, G. W. Hooper Sur. ..... Set surface csg. 101 ft.

Stroube and Stroube's No. 6 J. Mackey, 990 ft. from S line and 330 ft. from E line of survey, D. Reed Sur. ..... Drlg. 3,380 ft.

B. F. Traywick et al's No. 1 M. Vaughn, 330 ft. from S line and 330 ft. from W line of 108-ac. tract, 2 miles NW of Big Sandy, P. B. Standifer Sur. ..... Digging pits.

VAN ZANDT COUNTY

B. F. Frost et al's No. 1 G. J. Luther, 200 ft. from S line and 75 ft. from E line of survey, M. Gross Sur. ..... Set csg.; T.D. 1,150 ft.

Gray and Williams et al's No. 1 Paschall, 590 ft. from E line and 200 ft. from N line of 39-ac. tract, 5 miles NW of Jackson, D. Y'Barbo Sur. ..... Set surface csg. 88 ft.

J. O. Griffin's No. 1 Bruce & Gibbard, 1,000 ft. from S line and 330 ft. from E line of 134-ac. tract, G. Martinez Sur. ..... Derrick.

Pure Oil Co.'s No. 6 R. V. White, 250 ft. N of S line and 2,000 ft. W of E line of R. V. White 19.2-ac. tract, Mund Gross Sur. ..... Drlg. 1,756 ft.

George Ray et al's No. 1 C. Wilson, 1,100 ft. from S line and 2,420 ft. from W line of 172-ac. tract and survey, 6 miles W of Myrtle Springs, H. Cotes Sur. .. Derrick.

Ray Drilling Co.'s No. 1 J. W. Mallory, 1,150 ft. from S line and 150 ft. from W line of 217-ac. tract, John Walling Sur. ..... Derrick.

Van Oil Association's No. 1 Tankersley, 200 ft. from E and 1,000 ft. from S of farm, L. Landers Sur. ..... Drlg. 2,802 ft.

WOOD COUNTY

D. T. Cauble and Thompson's No. 1 N. G. Bobbett, 650 ft. from S line and 220 ft. from W line of tract, 2½ miles NW of Mineola, Daniel Fuller Sur. ..... S.D. 4,122 ft.

Wildcat Operations in West Texas

(Continued from Page 38)

Stanolind Oil & Gas Co.'s No. 2 E. F. Cowden, 660 ft. from N and W lines of Sec. 26, Blk. 43, Twp. 2s, T.&P.R.R. Sur. ..... T.D. 4,286 ft.; running 2½-in. tubing; flowed 105 b.l.s. Sept. 20.

Fred Turner's No. 1-B F. V. Addis, 440 ft. from the E line and 330 ft. from S line of Sec. 35, T.&P.R.R. Sur., Blk. 43, Twp. 2s ..... Cellar.

FISHER COUNTY

Condor Pet. Co.'s No. 1 Holley, 1,170 ft. W and 660 ft. from N lines of E half, Sec. 6, Blk. R, W. E. Richardson Sur. ..... Moving in material and S.D.

Cranfill & Reynold's No. 3 W. M. Flannigan, 165 ft. S of N line and 330 ft. W of E line of W half Sec. 200, Blk. 1, B.B.B.&C.Ry. Sur. ..... Drlg. 1,125 ft.

Cranfill & Reynold' No. 3 T. Willingham, Sec. 199, Blk. 1, B.B.B.&C.Ry. Sur. ..... Drlg. 2,290 ft.

Mid-Continent Petroleum Corp.'s No. 1 A. E. Pardue, 660 ft. N of S line and 330 ft. W of E line of NW Sec. 202, Blk. 1, B.B.B.&C.Ry. Sur. ..... Drlg. 3,004 ft.

Roeser & Pendleton's No. 1 T. E. Hill, 660 ft. N of S line, 330 ft. E of W line of N half NW Sec. 193, Blk. 1, B.B.B.&C.Ry. Sur. ..... Drlg. 2,915 ft.

Southern's No. 1 King, 660 ft. from N and 330 ft. from W line of SW Sec. 193, B.B.B.&C. Sur. ..... Moving in.

Southern Oil Co.'s No. 1-A Pardue, 2,310 ft. from S and 990 ft. from E lines of Sec. 202, B.B.B.&C. Sur. ..... T.D. 2,654 ft.

Texas Co.'s No. 3 T. A. Jean, 165 ft. N of S line and 330 ft. E of W line of E half Sec. 201, Blk. 1, B.B.B.&C.Ry. Sur. ..... Set csg. 1,985 ft.

GAINES COUNTY

R. H. Gill et al's No. 1 Crews, 1,320 ft. from S and 1,320 ft. from W line of Sec. 9, Blk. A-20, P.S.L. Sur. .. Location.

GLASSCOCK COUNTY

Schermerhorn Oil Co.'s No. 6 Kloh, 330 ft. from S line and 1,980 ft. from E line of Sec. 13, Blk. 33, Twp. 2s, T.&P.R.R. Sur. ..... Drlg. 2,148 ft.

Tribal Oil Co.'s No. 5-B Edwards, 330 ft. from S line and 330 ft. from E line of Sec. 6, Blk. 33, Twp. 2s, T.&P. Sur. ..... Spudding.

H. O. Wootin's No. 2-A W. P. Edwards, 660 ft. from S line and 660 ft. from E line of Sec. 17, T.&P.R.R. Sur., Blk. 33, Twp. 2s ..... Location.

HOWARD COUNTY

Continental Oil Co.'s No. 4 Eason, 2,310 ft. from S line and 1,884 ft. from W line of Sec. 6, Blk. 32, Twp. 2s, T.&P. Sur. ..... Drlg. 1,154 ft.

Cont nental Oil Co.'s No. 8 Settles, 1,980 ft. from N line and 1,625 ft. from W line of Sec. 133, Blk. 29, W.&N.W. Sur. ..... Rig up rotary 165 ft.

Donnelly & Norman's No. 1 Magnolia Petroleum Co. (Bell), 330 ft. from N line and 330 ft. from W line of the N half of SW of Sec. 12, T.&P.R.R. Sur., Blk. 30, Twp. 1s ..... Drlg. 1,600 ft.

S. B. Dorn et al's No. 1 J. P. Davis, 2,310 ft. from N line and 2,310 ft. from E line of Sec. 2, T&P.R.R. Sur., Blk. 30, Twp. 1s ..... Location.

Group No. 1 Oil Co. and Continental Oil Co., 2,640 ft. from N line and 1,980 ft. from E line of Sec. 5, T.&P.R.R. Sur., Blk. 32 ..... Location.

L. C. Harrison et al's No. 2 Texas Land & Mortgage Co., 2,310 ft. from E line and 330 ft. from the S line of Sec. 4, T.&P.R.R. Sur., Blk. 30, Twp. 1s ..... Location.

Merrick & Lamb's No. 8 Chalk, 1,650 ft. from N line and 2,310 ft. from W line of Sec. 125, Blk. 29, W.&N.W. Sur. ..... Spudding.

Joe Rusk et al's No. 2 G. M. Dodge Estate, 330 ft. from N line and 2,310 ft. from the E line of Sec. 9, H.&T.C.R.R. Sur., Blk. 30, Twp. 2s ..... Location.

W. A. Sheets Oil Co.'s No. 1 J. L. Wright, 1,630 ft. from S line and 1,980 ft. from W line of Sec. 41, T.&P. R.R. Sur., Blk. 33, Twp. 1s ..... Location.

Southern Oil Co.'s No. 1 Denman, 2,310 ft. from N line and 330 ft. from W line of Sec. 10, Blk. 30, Twp. 1s, T.&P.R.R. Sur. ..... Bldg. derrick.

Southern Oil Co.'s No. 1 Denman, 1,650 ft. from N line and 330 ft. from W line of Sec. 14, Blk. 30, Twp. 1s, T.&P.R.R. Sur. ..... Bldg. derrick.

Ungren & Frazier's No. 1 Davis, 330 ft. from S line and 990 ft. from W line of Sec. 2, Blk. 30, Twp. 1s, T.&P. Sur. ..... Location.

IRION COUNTY

R. D. Covington's No. 1 Mitchell, 150 ft. from S line and 150 ft. from W line of Sec. 724, C. Wimsch Sur. ..... Drlg. 390 ft.

Perry Fox's No. 1 Reach, 170 ft. E and 45 ft. S of the most southerly NW cor. of Sec. 1,026, H.E.&W.T. Sur. ..... Drlg. 300 ft.

P. A. Johnson's No. 1 Townsite, Blk. 25, C. Schlote Sur., 150 ft. from S and W of Blk. ..... Running csg.; T.D. 1,273 ft.

JONES COUNTY

Dyer's No. 1 Odom, 200 ft. from S and 170 ft. from W of N 320 acres, G. Zumwalt Sur. ..... T.D. 2,040 ft.

LOVING COUNTY

R. L. Allen's No. 1 fee, 4,290 ft. from NE line, 330 ft. from SE line, Sec. 82, H&T.C. Sur. ..... Location.

R. L. Allen's No. 2 fee, 4,290 ft. from NE line, 990 ft. from SE line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

R. L. Allen's No. 3 fee, 4,290 ft. from NE line, 990 ft. from NW line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

R. L. Allen's No. 4 fee, 4,290 ft. from NE line, 330 ft. from NW line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

Eppenauer Drlg. Co.'s No. 1-C Allen, 330 ft. from NW line, 2,310 ft. from SW line, Sec. 90, Blk. 1, W.& NW Sur. ..... Location.

Eppenauer Drlg. Co.'s No. 1-A Victor, 330 ft. from SW and 338 ft. from SE of NW of N half Sec. 4, Blk. 2, W.&N.W. Sur. ..... Rigging up standard tools.

MITCHELL COUNTY

Neeley-Prater's No. 1 Morrison, 330 ft. from N line and 330 ft. from E line of Sec. 34, Blk. 29, T.&P.R.R. Sur. ..... Spudded and S.D.

PECOS COUNTY

M. H. Black et al's No. 1 E. E. Powell et al, 150 ft. from NE line and 150 ft. from SE line of Sec. 102, H.&G.M.R.R. Sur., Blk. 10 ..... Location.

M. D. Bryant's No. 1 Robertson, 375 ft. S and 150 ft. E from NW cor. of Robertson Sur. (this well is east offset to Mid-Kansas Oil & Gas Co.'s No. 23 Smith-Taylor) ..... Straightening crooked hole; T.D. 428 ft.

Culberson Bros.'s No. 15-B Monroe, 725 ft. from N line and 1,380 ft. from E line of Sec. 39, Blk. 194, G.C.&S.F.R.R. Sur. ..... Location.

Humble Oil & Refining Co.'s No. 1 White, Baker, 1,320 ft. from N and E lines of Sec. 44, Blk. Z, T.C. Sur. ... Drlg. 4,964 ft.

Kemper & Kimberlin et al's No. 2 D. B. Gregg et al, 2,490 ft. from NW line and 1,470 ft. from NE line of Sec. 101, H.&G.M.R.R. Co. Sur., Blk. 10 ..... Location.

Mid-Kansas O. & G. Co.'s No. 18 Smith-Taylor, 1,296 ft. from S line, 1,390 ft. from W line, Sec. 33, G. C.&S.F. Sur., Blk. 194 ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 21 Smith-Taylor, 1,700 ft. from S line and 275 ft. W of northerly NW cor. of Fred Turner, Jr., Sur., but located in Sec. 33, Blk. 194, G.C.&S.F. Sur. ..... Drlg. 1,180 ft.

Mid-Kansas Oil & Gas Co.'s No. 22 Smith-Taylor, 250 ft. from S line and 324 ft. from W line of NW cor. of Fred Turner, Jr., Sur. No. 2, but located in Sec. 33, Blk. 194, G.C.&S.F. Sur. ..... Drlg. 115 ft.

Mid-Kansas Oil & Gas Co.'s No. 23 Smith-Taylor, 332 ft. S of N line of Sec. 33 and 160 ft. from W line of Robertson Sur., Sec. 33, Blk. 194, G.C.&S.F.R.R. Sur. .. Drlg. 495 ft.

Mid-Kansas Oil & Gas Co.'s No. 32-A I. G. Yates, 205 ft. from N line and 250 ft. from W line of NW cor. of Fred Turner, Jr., Sur. No. 3, but located in I. G. Yates Sur., A-8195 ..... Underreaming 875 ft.

Mid-Kansas Oil & Gas Co.'s No. 34-A I. G. Yates, 150 ft. from N line and 250 ft. from E line of NW cor. of Fred Turner, Jr., Sur. No. 4, but located in I. G. Yates Sur., A-8195. ..... Drlg. 1,205 ft.

Mid-Kansas Oil & Gas Co.'s No. 35-A, 250 ft. from N line and 324 ft. from E line of NW cor. of Fred Turner, Jr., Sur. No. 2, but located in I. G. Yates Sur., A-8195. ..... Bldg. road.

Sproles & O'Neal's (rec.) No. 2-A Fred Turner, Jr., 196 ft. from N line, 300 ft. from W line of Fred Turner, Jr., Sur. No. 1 ..... Location.

Sproles & O'Neal's (rec.) No. 4-A Fred Turner, Jr., 1,640 ft. from N line, 250 ft. from W line of Fred Turner, Jr., Sur. No. 1 ..... Drlg. 970 ft.

Sproles & O'Neal's (rec.) No. 5-A Fred Turner, Jr., 250 ft. from N, 250 ft. from W of C SE cor. of Fred Turner, Jr., Sur. No. 1 ..... Location.

Sproles & O'Neal's No. 6-A Fred Turner, Jr., 1,940 ft. from S line, 300 ft. from W line of Fred Turner Sur. No. 1 ..... S.D. 1,470 ft.

Sproles & O'Neal's No. 7-A Fred Turner, 280 ft. from S line, 250 ft. from W line of Fred Turner, Jr., Sur. No. 1 ..... Location.

Sproles & O'Neal's No. 8-A Fred Turner, Jr., 560 ft. from S line, 550 ft. from E line of Fred Turner Jr., Sur. ..... Location.

Sproles & O'Neal's No. 1-B Fred Turner, Jr., 250 ft. from N line, 308 ft. from E line of Fred Turner, Jr., Sur. ..... Rig up.

Sproles & O'Neal's No. 2-B Fred Turner, Jr., 250 ft. from N line, 305 ft. from W line of Fred Turner, Jr., Sur. ..... Set csg. at 1,143 ft.

Sproles & O'Neal's No. 3-B Fred Turner, Jr., 356 ft. from S line, 250 ft. from W line of Fred Turner, Jr., Sur. ..... Location.

Sproles & O'Neal's No. 4-B Fred Turner, Jr., 717 ft. from S line, 250 ft. from E line of Fred Turner, Jr., Sur. No. 2 ..... Location.

Sproles & O'Neal's No. 1-C Fred Turner, 250 ft. from N line, 250 ft. from W line of Fred Turner, Jr., Sur. ..... Location.

Sproles & O'Neal's No. 2-C Fred Turner, Jr., 205 ft. from N line, 205 ft. from E line of Fred Turner, Jr., Sur. No. 3 ..... S.D. 585 ft.

Sproles & O'Neal's No. 1-D Fred Turner, Jr., 150 ft. from N line, 250 ft. from W line of Fred Turner Sur. No. 41 ..... Set csg. 1,050 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 12-C University, 928 ft. from N, 740 ft. from E line of Sec. 12, Blk. 2, University land ..... Drlg. 7,100 ft.

Big Lake Oil Co.'s No. 14-C University, 725 ft. from S line and 2,730 ft. from E line of Sec. 25, Blk. 9, University Land Sur. ..... Location.

Big Lake Oil Co.'s No. 15-C University, 660 ft. from E line and 660 ft. from S line of Sec. 25, Blk. 9, University Land Sur. ..... Location.

Continental Oil Co.'s No. 9-B University, 1,900 ft. from S line, 1,805 ft. W of E line of Sec. 39, Blk. 9, University Land Sur. ..... Drlg. 8,040 ft.

RUNNELS COUNTY

Agnew et al's No. 1 H. B. Fowler, 150 ft. S and W of NE cor. of Sec. 23, N. Travis Sur. No. 533 ..... Spudded.

Golden Pet. Co.'s No. 2 McMillan, Subdv. 22, N. Travis Sur. ..... Moving in material.

B. C. Mann et al's No. 1 H. E. Wade, 150 ft. from S and 1,650 ft. from W line, Subdv. No. 8, Norvel Travis Sur. No. 533 ..... S.D. 150 ft.

TAYLOR COUNTY

Crissman et al's No. 1 City of Abilene, 1,300 ft. from N and 1,250 ft. from E lines of Sec. 66, Bal Sur. ..... Rig up and S.D.

TOM GREEN COUNTY

J. R. Midlock's No. 1 Frank Garlitz, 150 ft. from S line and 840 ft. from E line of J. H. Mueller Sur. No. 2,201 ..... Drlg. 500 ft.

UPTON COUNTY

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W, Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. ... Drlg. 6,880 ft.

WARD COUNTY

Abell Brothers' No. 1 Archenhold et al, 2,310 ft. from NE line and 330 ft. from SE line of Sec. 23, H.&T.C. Sur., Blk. 5 ..... Underreaming 880 ft.

Atlantic Oil & Prod. Co.'s No. W. D. Johnson, 330 ft. from NE line and 990 ft. from SE line of NE half of Sec. 9, H.&T.C. Sur., Blk. 34 ..... Drlg. 1,630 ft.

Atlantic Oil & Prod. Co.'s No. 9 Johnson, 330 ft. from NE line and 990 ft. from NW line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Drlg. 1,491 ft.

Atlantic Oil & Prod. Co.'s No. 10 Johnson, 990 ft. from NE line and 330 ft. from NW line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

Atlantic Oil & Prod. Co.'s No. 11 Johnson, 2,310 ft. from NE line and 1,650 ft. from SE line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

Atlantic Oil & Prod. Co.'s No. 12 Johnson, 990 ft. from SE line and 990 ft. from NE line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

Atlantic Oil & Prod. Co.'s No. 13 Johnson, 330 ft. from NE line and 330 ft. from SE line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

Atlantic Oil & Prod. Co.'s No. 14 Johnson, 330 ft. from NE line and 2,310 ft. from NW line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

Atlantic Oil & Prod. Co.'s No. 15 Johnson, 330 ft. from SE line and 1,650 ft. from NE line of Sec. 9, Blk. 34, H.&T.C. Sur. ..... Location.

George Bentley et al's No. 1 C. Bergman, 330 ft. from NE line and 2,310 ft. from NW lines of Sec. 26, Blk. 5, H.&T.C. Sur. ..... T.D. 2,650 ft., plugged back to 2,470 ft., fishing.

George Bentley et al's No. 1 A. Emory, 1,320 ft. from NE line and 2,310 ft. from NW line of Sec. 26, Blk. 5, H.&T.C. Sur. ..... T.D. 2,301 ft.

Eastland O'l Co.'s No. 2 Johnson, 1,980 ft. from SE line and 1,980 ft. from SW line of Sec. 24, Blk. 34, H.&T.C. Sur. ..... Drlg. 190 ft.

Eppenauer Drlg. Co.'s No. 1 University, 380 ft. from N and 440 ft. from E of S half of Blk. 16 ..... Fishing for tools; T.D. 2,650 ft.; swabbing 25 bbls. of oil per day.

Gulf Prod. Co.'s No. 22 Hutchings, 330 ft. from N line and 330 ft. from W line of Sec. 4, Blk. F, G.M.M. B.&A. Sur. ..... Drlg. 400 ft.

Gulf Prod. Co.'s No. 26 O'Brien, 330 ft. from N line and 330 ft. from E line of Sec. 17, Blk. F, G.M.M.B.&A. Sur. ..... Ready to spud.

Jack Leidecker et al's No. 1 A. Archenhold et al, 2,310 ft. from NE and 2,310 ft. from NW line of Sec. 23, H.&T.C.R.R. Sur., Blk. 5 ..... Drlg. 2,585 ft.

Sinclair Prairie Oil Co.'s No. 3 H. Archenhold, 330 ft. from NE lines and 330 ft. from SE lines of SW of Sec. 23, H.&T.C. Sur., Blk. 5 ..... Rig up.

S. A. Thompson et al's No. 4 W. D. Johnson, 330 ft. from NE line and 2,310 ft. from NW line of the SW half of Sec. 9, H.&T.C.R.R., Blk. 34 ..... T.P. 2,292 ft.; running tubing; T.D. 2,536 ft.

WINKLER COUNTY

Harry Adams et al's No. 2 Scarborough, 990 ft. from N line and 990 ft. from E line of Sec. 1, Blk. 77, P.S.L. Sur. ..... T.D. 3,183 ft.; flowed 48 bbls. first 24 hrs. after shot.

Colonial Oil Co.'s No. 2 State Scarborough, 990 ft. from W and 102½ ft. N of the NE cor. of Sec. 1, School Blk. 77, located in Sec. 1, Blk. W. F. ..... Rig up and S.D.

Sid Richardson's No. 3 John Seally, 2,310 ft. from the N line and 330 ft. from the W line of Sec. 94, G.&M.B.B.&A. Sur. ..... Flowing 38 bbls. of oil daily; T.D. 3,225 ft.

Richardson et al's No. 1-D Scarborough, 990 ft. from N line and 1,650 ft. from E line of Sec. 18, Blk. 74, P.S.L. Sur. ..... Rig up.

Richardson et al's No. 2 State, 102.5 ft. N and 330 ft. E from the NW cor. Sec. 1, Blk. 77, P.S.L. Sur. ..... Drlg. 875 ft.

L. H. Wentz' No. 1 Daugherty, 330 ft. from N and 330 ft. W of Sec. 3, Blk. C-23, P.S.L. Sur. ..... Location.

Wildcat Operations in Texas Panhandle

Week Ending October 2

CARSON COUNTY

Company, well, farm name, section and block—	Remarks:
Reiger et al's No. 1 Foster, 330 ft. from N and E lines of SW Sec. 93, Blk. 7, I.&G.N.R.R. Sur.	Spudded and S.D.

GRAY COUNTY

Anderson & Bean's No. 3 J. C. Vollmert, 330 ft. from S line, 330 ft. from E line, SW Sec. 140, I.&G.N. Sur., Blk. 3	Cellar.
Charles Black's No. 1 fee, 330 ft. from W, 661 ft. from S line of SW Sec. 45, Blk. 25, H.&G.N. Sur.	O.W.D.D.; T.D. 2,965 ft.
Cambrian Oil Co.'s No. 2 G. Cole, 330 ft. from S line, 330 ft. from W line, SW Sec. 105, I.&G.N. Sur., Blk. 3	Rig up.
Chism et al's No. 1 J. M. Carpenter, 330 ft. from N line, 330 ft. from E line of SE Sec. 37, H.&G.N. Sur., Blk. 25	Drlg. 2,530 ft.
Continental Oil Co.'s No. 4 Finley, Sec. 32, Blk. 2-B, H.&G.N. Sur.	O.W.D.D.; T.D. 2,957 ft.
Denworth Oil Co.'s No. 2-B Webb, 330 ft. from N and W lines, SE NW Sec. 61, Blk. 25, H.&G.N. Sur.	Drlg. 2,430 ft.
Gulf Prod. Co.'s No. 5 Ellis Cockrell, 330 ft. from N and E lines of S½ Sec. 2, Blk. M-21, T.C.R.R. Sur.	Location.
Hendron et al's No. 1 Husselby, 330 ft. S and E, SW SW Sec. 11, Blk. A-9, H.&G.N. Sur.	Rig.
Mazda-Shell's No. 4 Coombs-Worley, 990 ft. from N line, 330 ft. from E line, Sec. 35, Blk. 3, I.&G.N. Sur.	Rig.
Phillips Pet. Co.'s No. 7 Jackson, 990 ft. from E, 330 ft. from S lines of S½ SE Sec. 88, Blk. 2-B, I.&G.N. Sur.	Drlg. 2,951 ft.
Phillips Pet. Co.'s No. 1 Benton, 360 ft. N, 345 ft. W from E lines of W½ E½ Sec. 63, Blk. 3, I.&G.N. R.R. Sur.	Set csg. 3,130 ft.
Baker Saulsberry's No. 1 John Cubine, 990 ft. from N and E lines, of SE Sec. 36, Blk. 25, H.&G.N.R.R. Sur.	Drlg. 1,120 ft.
Sinclair Prairie Oil Co.'s No. 3 P. A. Coomley, 1,800 ft. from S, 2,618 ft. from W lines of S 246 acres of Sec. 57, Blk. 3, I.&G.N. Sur.	C.O. 2,915 ft.
Skelly Oil Co.'s No. 1 L. H. Webb, 990 ft. from E line, 330 ft. from N line of S½ of Sec. 61, H.&G.N. Sur., Blk. 25	T.P. 2,474-80 ft.; flowed 368 bbls. first 8½ hrs.; T.D. 2,480 ft.
Skelly Oil Co.'s No. 5 Vicars, 440 ft. from N, 330 ft. from W line of E½ NW Sec. 127, Blk. 3, I.&G.N. R.R. Sur.	Drlg. 2,572 ft.
Southern Pet. Explts. Co.'s No. 5 McConnell, 330 ft. from N, 990 ft. from W lines of NW Sec. 174, Blk. 3, I.&G.N.R.R. Sur.	Spudded and S.D.
Sun Oil Co.'s No. 2-B Combs-Worley, 330 ft. from S line, 990 ft. from E line of SW of Sec. 34, I.&G. N. Sur., Blk. 3	Building rig.
Vulcan Oil Co.'s No. 1 M. H. Kinard, 330 ft. from N line, 330 ft. from W line, SW Sec. 41, H.&G.N. Sur., Blk. 25	Cellar.
F. H. Yealy's No. 2 Crank, 960 ft. from N and E lines of N 160 acres of W 400 acres of Sec. 163, Blk. 3, I.&G.N.R.R. Sur.	Rig up standard tools 1,100 ft.

HUTCHINSON COUNTY

Huber Pet. Corp.'s No. 1-A Huber Dunaway, 330 ft. from S, 990 ft. from E lines of S 200 acres of Sec. 7, Blk. Y-a, T.C.R.R. Sur.	Cellar.
Phillips Pet. Co.'s No. 1 Ponter, 33 ft. from S and W lines of S 80 acres of E½ Sec. 6, Blk. M-21, T.C. R.R. Sur.	Drlg. 1,805 ft.
Dave Rubin-Henderson's No. 1 fee, 86 ft. from S, 299 ft. from E of SW cor. Sec. 82, Blk. 46, H.&T.C. R.R. Sur.	Rig up standard tools 2,015 ft.
H. Stekol's No. 4 G. A. Whittenburg, 450 ft. from N line, 990 ft. from W line, Sec. 58, Blk. M-23, T.C. R.R. Sur.	To test; T.D. 3,032 ft.

RANDALL COUNTY

Woolsey & Devore's No. 1 Belew, 330 ft. N, 1,320 ft. E of NE, Sec. 85, Blk. 2, A.B.&M. Sur.	S.D. 4,211 ft.

WHEELER COUNTY

Martin & Dubose's No. 1 Grogan, C NE Sec. 57, Blk. 23, H.&G.N. Sur.	Fishing 1,545 ft.
Piney O. & G. Co.'s No. 1 J. P. Koons, 330 ft. from E line, 330 ft. from S line of E½ NE Sec. 43, H.& G.N. Sur., Blk. 24	T.P. 2,282-98 ft.; pumping 10 bbls. per hr.; T.D. 2,298 ft.

New Deeper Sand Found Productive at Greta Stimulates Activity; Good Well at Ariola

By W. A. SPINNEY
Gulf Coast Bureau, The Oil and Gas Journal

HOUSTON, Tex., Oct. 2.—In Gulf Coast district a number of important events in scattered areas give indications that additional new fields may be opened, and older areas extended. A well estimated at 4,000 bbls. a day blew in in the Ariola Field, Hardin County, the past week. It is the largest well yet found on this salt dome and extends production about 800 feet to the northeast. In the Greta Field, Refugio County, a new deep sand well on the east outpost area was completed making 400 bbls. a day. This pay sand was found 1,500 feet deeper than any other in the field and many believe that this sand underlies the entire present field and will result in another drilling campaign. The wildcat test near Nome, in Jefferson County, which showed oil on a drill stem test about two weeks ago, and which has been fishing for a swab, was looking better when it was found that the pressure had forced the screen up the hole to a depth of 4,500 feet from the top, while the total depth is 6,323 feet. In the Colleta area of Victoria County a wildcat test which showed oil about two weeks ago and was plugged back and redrilled, at latest report was preparing to drill the cement plug and make a production test. A number of lease trades have been reported in the surrounding territory during the past 10 days.

The Ariola well is Republic Production Co. and Houston Oil Co.'s joint No. 4 fee. It flowed wild for several days before being shut in, making what was estimated to be 4,000 bbls. of oil and 20,000,000 to 30,000,000 feet of gas a day. It is by far the largest well yet found in the field and is the third to produce oil. It was drilled to a total depth of 4,794 feet in salt and plugged back to 4,200 feet and 7-inch casing cemented at 4,130 feet. The oil was found in sand from 4,130-4,200 feet.

Geophysical Discovery

This area was discovered geophysically in 1928, but it was not until about a year ago in September, 1932, that the first well was drilled on this prospect. The discovery well was put down by the same companies on a tract of 25,000 acres of fee land. It was No. 1 Ariola fee, Ariola Survey, and was drilled to 4,324 feet in salt and plugged back to 4,157-71 feet, where initially it made 285 bbls. of oil and 400 bbls. of water in 24 hours. It dropped off, however, and has been making less than 50 bbls. net oil. The second well to find oil at Ariola was the same company's No. 3 Ariola, making initially 110 bbls. of fluid in 12 hours, of which 55 per cent was oil and the balance water. Eight tests have been drilled in the immediate area surrounding the new producer, which is about 800 feet northeast of the discovery well. Five of these tests have been dry holes, several of which had been drilled into the salt proving the existence of the dome. The deepest test yet drilled at Ariola is the Gulf Production Co.'s No. 1 Kirby Lumber Co., located about 3,000 feet due west of the new producer. It was abandoned at 6,737 feet.

Stoneleigh Oil & Gas Co.'s No. 1 Zimmer, in the Colleta district of Victoria County, is preparing to test oil sand at 2,846-84 feet after drilling plug at 2,850 feet. On a drill stem test this well showed 18 fourbles of oil, sand and water in 25 minutes. It is the shallowest horizon in which oil has been found in the lower coastal country and it has resulted in a number of lease and royalty trades since it first showed oil about two weeks ago.

Four other locations were made during this week in the area offsetting and surrounding the discovery shallow sand test. Material is moving in on two of these locations and the derricks are being erected at the other two.

Deep Sand in Greta Field

The Greta Field in Refugio County was given added importance during the week by the completion of a well in a new deep sand in a test on the east edge of the field. It is probable that this sand underlies the entire present producing area of the field and perhaps extends over an even larger area. The production until now has been from a sand at 4,400 feet. The deep sand well is the Nesral Oil Co.'s No. 2 Wilson Heard, the most easterly well in the field, which found the top of the pay sand at 5,911 feet and after cementing casing at 5,9 8 feet was drilled to a total depth of 5,920 feet where it flowed 400 bbls. of oil through a one-quarter inch choke the first 24 hours. The oil tests 38 gravity, corrected for temperature. This is the discovery well in the deep sand which is about 1,500 feet deeper than the present Greta sand.

Three horizons now are producing at Greta. The 1,730-foot level is producing gas, the 4,400-foot sand oil and gas, and the 5,900-foot horizon both oil and gas. The shallow gas sand has only one well located on the east side of the field, about a half mile north of the deep sand well. The finding of another oil sand in the Greta Field is expected to stimulate the development in that area. A number of other gas sands have been definitely established all over the field but no wells have been completed in them.

Production in the 4,400-foot sand was extended to the south a quarter of a mile by Edwin Jones' No. 1 A. O'Brien. It made 500 bbls. of oil a day through a seven-sixty-fourths and five-sixteenths-inch choke from 4,351-85 feet. United Production Corp.'s No. 6 Fox found a showing of oil in sand at 4,390 feet and has set and cemented casing at 4,362 feet. This well will be a half mile extension on the west side. Humble Oil & Refining Co.'s No. 1 F. Heard is a new location in the southeast part of the field. It is about a half mile from the nearest other production and will be an outpost test that will be watched with interest.

The Texas Co. continues active in the Greta Field, Refugio County, in the lower Gulf Coast area, by acquiring approximately 400 acres of leases adjoining its present holdings in the field. The new acreage is in the Welder ranch, lying west of the company's 1,000-acre lease and just north of the Humble Oil & Refining Co.'s recent purchase of 252 acres. The Texas Co.'s total holdings on the Welder ranch are 1,400 acres.

The Texas Pipe Line Co. is constructing a pipe line from the Greta Field to the Refugio Field, both in Refugio County. The line will consist of approximately 9 miles of 8-inch pipe with one pump station at Greta. Work on this line is expected to be completed by October 10. A. F. Day Contracting Co. of Dallas has the job. The line will tie into the Humble Oil & Refining Co.'s pipe line at Refugio, and from there the Humble will carry the oil the Corpus Christi, where it will be loaded into tankers for shipment.

The Texas Co. has made two locations on its original 1,000-acre lease but by acquiring the additional 400 acres the drilling obligations have been extended from October 5, 1933, to April 5, 1934.

The Louise area of Wharton County, where 10 wildcat tests are drilling, nine by one company, is expected to be definitely established as a field this week when the Pure Oil Co.'s No. 1 Stewart, Morris and Cummings Survey, Section 25, is tested. This well showed for a producer on a drill stem test several months ago, but drilled deeper in an effort to find the Yegua, which is believed to be around 9,000 feet. It went to a total depth of 8,067 feet, where it blew out and a fishing job developed. The company decided to plug it back to an oil showing that was found in the Frio at 5,963-71 feet, where screen is set. A total of 3,000 bbls. of storage has been erected.

Pure Oil Co.'s No. 1 Kuntze, Morris and Cummings Survey, Section 27, found a new sand for the Louise area during the past week at 7,128-34 feet. It was showing oil and while casing was being run preparatory to testing the sand a fishing job developed when a joint of casing dropped into the hole. It is believed the Pure Oil Co. expects to make a deep test of each one of its tests now drilling at Louise until one is successful in reaching and testing the lower sands.

All of the acreage is under lease. The Gulf Production Co. bought the remaining acreage that was open there, 435 acres belonging to C. N. Brown. A test southwest from the No. 1 Stewart, Smith, McDannald and Pure Oil Co.'s No. 1 Hudgins, found a sand at 5,848 feet, with nothing showing, and it was drilling deeper at 6,050 feet.

Other tests drilling at Louise include Pure Oil Co.'s No. 1 Garrett, Section 28, drilling at 6,018 feet, in sand with nothing showing; No. 1 Lancaster, Section 23, drilling at 4,956 feet; No. 1 McIntyre, spudding; No. 1 Houston, Section 28, drilling at 3,232 feet; No. 1 Weaver, drilling at 5,642 feet; No. 1 Wilder, Section 28, drilling at 5,530 feet.

Blowout at Livingston

At Livingston, Polk County, Skelly Oil Co.'s No. 1 Saunders, the most southwesterly well in the field, blew out late Saturday and at latest report was running wild. It had recently been completed estimated to be making around 5,000,000 feet of gas and 25 bbls. of oil a day from a total depth of 4,315 feet. Owners were attempting to kill the well to work it over when it got out of control.

Shell Petroleum Corp.'s No. 2 Davis-Holmes, the most westerly well in the field, has been reworked and is now making 150 bbls. a day from a total depth of 4,400 feet. It originally was drilled early this year to 4,438 feet, where it swabbed some oil and water and was temporarily abandoned after being plugged back, failing to shut off the water.

Humble Oil & Refining Co.'s No. 1 Grandbury is a new location west of the Skelly Oil Co.'s gas well.

Sun Oil Co. and Shell Petroleum Corp.'s No. 1 Paggi, wildcat test near Nome, in Jefferson County, was looking better when it was found that the pressure had blown the screen up the hole to within 4,500 feet of the top of the ground. It also is reported that the hole filled up 5,000 feet with oil while fishing for a swab was in progress. The swab was recovered and the owners were preparing to drill the test deeper when it was found that the gas pressure has blown the screen up the hole.

An attempt will be made to reset the screen on bottom and then make another production test. The test was showing considerable oil before the casing was set and cemented about three weeks. It is the first test drilled in the area. The showing of oil was found in sand at 6,003-23 feet.

In the older salt dome areas the work is expected to show an increase with the recent increase in the crude oil prices. The only work that has been in progress in these areas has been that actually necessary. The most active salt dome development at the present time is Barbers Hill, where 10 to 12 rigs are kept running all the time. Development continues at Hull, with 8 to 10 wells drilling. High Island has five in the course of drilling.

Gulf Coast Fields and Wildcats

Week Ending September 30

DAMON MOUND—BRAZORIA COUNTY

Company, farm and location—	Remarks:
Intercoastal Oil Co.'s No. 11 Wisdom, 350 ft. E of No. 6, Blk. 51, Lot D, A. Durst Sur.	T.D. 3,160 ft.; reaming.
Sinclair Prairie Oil Co.'s No. 31-A Bryan, 155 ft. N, 45 deg. E of SW cor. of Blk. 28, Masterson Subd., and 140 ft. S, 45 deg. E, A. Darst Sur.	Salt 7,838-8,112 ft.; abd.

MANVEL—BRAZORIA COUNTY

Texas Co.'s No. 1 Belcher (W.O.), 157 ft. SE of NW line and 223 ft. NE of SW line of Lot 18, Blk. A, Suburban Gardens Subd, H. N. Little Sur.	T.D. 5,537 ft.; P.B. and sidetracked to 5,489 ft.; set screen; comp. 92 bbls.; 12 hrs.; ¾-in. choke.
Texas Co.'s No. 3-B Belcher, 2,747 ft. NE, 1,478 ft. SE of W center of lease	Derrick.
Texas Co.'s No. 5-A Belcher, S 40 deg. W 2,430 ft., S 48 deg. E 300 ft. from N cor. of "A" lease, H. N. Little Sur.	Drlg. lime and gumbo 4,029 ft.
Texas Co.'s No. 6 Belcher, H. N. Little Sur., South 42° W 2,400 ft. and S 48° E 400 ft. from N cor. lease	T.D. 5,476 ft.; 7-in. csg. cmtd. at 5,382 ft.
The Texas Co.'s No. 2 Davis, 300 ft. out of S cor. Lot 42, H. N. Little Sur.	T.D. 5,812 ft.; cmtd. back to 3,790 ft.; standing.
Texas Co.'s No. 1 Ellis, 1,660 ft. N, 807 ft. S, from NW cor. of lease, H. N. Little Sur.	Rigging.

STRATTON RIDGE—BRAZORIA COUNTY

Amerada Pet. Corp.'s No. 3 Seaborn (W.O.), Austin & Williams Sur., 1,250 ft. E of W line, 4,550 ft. S of N line	T.D. 5,580 ft. in salt; P.B. to 4,350 ft.

(Continued on Page 56)

Completions in Louisiana-Arkansas-Mississippi Show Big Increase With More New Work

By D. H. BANCROFT
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., Oct. 2.—So far as completions and new work are concerned, the week's record stands out in marked contrast to the week before—eighteen completions and an equal number of new jobs compared to four or five of each the previous week. Otherwise there was little of moment, all but a couple of dozen of the nearly 200 active wells in the territory being at that stage where there is nothing to report on them except that they are "making hole." Deep holes in Mississippi and results of similar tests in the Converse district of Sabine Parish, Louisiana, are interesting.

In both cases the tests have gone far below where production has been obtained in proven territory and where it was expected to be found in wildcat areas. In Converse, Lambert and others' No. 1 Edwards, SW NW Section 29-9-13, a mile southeast of the discovery well and the same distance southwest of nearest production, was abandoned on account of salt water, total depth 3,360 feet, after plugging back to 2,000 feet and using acid without results. Joe Modisette's No. 3 Frost-Johnson, NE SW Section 16-9-13, a quarter mile north of his two previous successful completions at around 1,800 feet, was abandoned in hard lime at 4,433 feet after missing a show of anything at depths where other wells in the field have produced and testing only a show of gas at deeper levels, 3,040 feet. It appears, as has been remarked before, that Converse is as spotted or erratic as Zwolle, 12 miles southeast, but H. C. Lessenger nevertheless is still drilling on No. 1 Bowman-Hicks, NW SW Section 13-9-13, a mile east and north of the latest extension well in that direction, at 3,225 feet.

Mississippi Deep Test

Mississippi's deep tests are: Eastman-Gardiner Interests' No. 1 Bank of Deming, NW NW Section 26-8-15, Covington County, coring Selma chalk at 7,404 feet; Snow-Block Petroleum Co.'s No. 1 Watson, NE SW Section 24-7-13, Jones County, drilling in the Wilcox at 4,127 feet; Love Petroleum Co.'s No. 2 Interior Lumber Co., NW NW Section 28-6-2e, Rankin County, an old well drilled deeper after being temporarily abandoned at 827 feet which showed a little oil at around 3,650 feet, could not bail down more than 1,200 feet from the surface on a salt water test and was coring red shale at 3,700 feet; Kistler & Stivers' No. 1 Blake Estate, Section 15-17-4e, Warren County, drilling shale and shell at 4,800 feet.

Alabama also has a couple of deep holes on the active list, Escambia Oil Co.'s No. 1 State Line Lumber Co., NE NW Section 24-1n-10, Escambia County, was coring sand and shale at 5,920 feet. Scout reports do not reveal any show of oil or gas to amount to anything, if any at all, so far along the log. DeSoto Oil & Gas Co.'s No. 1 Gardner, Section 22-15-16, Lamar County, was reaming at 4,120 feet to set a string of 5⅞-inch to protect the hole, the last string, 6⅝ inch, having been cemented at 3,216 feet after a show of salt water that bailed dry at 2,680 feet.

Acid treatment of wells in the Monroe gas field in Louisiana continues successful, two wells in Morehouse Parish responding to the treatment with approximately 18,000,000 feet open flow. Several Converse and Zwolle wells where the process was first applied also are being treated.

Eighteen Completions

The completions in the territory were divided, Louisiana having the bulk. Five of the Louisiana wells were failures, two of them abandoned locations, five gas wells in Monroe territory with a total open flow of 31,646,776 feet, one 250-bbl. producer in Zwolle and four producers in Converse, two of which were reported last week but not formally listed. These completions were: Marr & Collins' No. 1 Desha Lumber Co., Section 42-21-12, East Carroll Parish, salt water on drill stem test at 2,885-3,100 feet, abandoned in red sand at 3,302 feet. Top of the Midway was at 2,490 feet, top of the so-called gas rock at 2,862 feet, top of the red beds at 2,990 feet; two dry drill stem tests at 2,882-2,900 feet, a third at 2,862-2,990 feet resulting in four joints of mud and salt water and a fourth at 2,885-3,100 feet, developing 75 joints of salt water in the 15 minutes the tool was left open. H. H. Temple's No. 1 Edenborn estate, Section 20-7-3w, and No. 1 Guaranty Bank, NW NW Section 9-5-1w, Grant Parish, were abandoned as locations.

In Morehouse Parish, United Gas Public Service Co.'s No. 29 Crossett Lumber Co., SW SW Section 17-22-5, gauged 5,868,000 cubic feet of gas at 930 pounds rock pressure from 2,276 feet; No. 30 Crossett Lumber Co., Section 25-22-4, gauged 12,636,000 feet at 950 pounds rock pressure after a shot of acid at 2,216 feet; and No. 2 Patton, Section 12-20-4, gauged 5,868,000 feet, 435 pounds rock pressure after acid at 2,212 feet. Inabnet & Pipes' No. 3 Nelson, Section 4-18-4, Ouachita Parish gauged 1,500,000 feet open flow from 2,180 feet.

Other New Producers

Zwolle's lone completion was J. E. Bauer and others' No. 3 Barthold, SE NE Section 35-8-12, completed at 2,383 feet flowing 250 bbls. through tubing. No. 1 on this lease was completed by Lanier & Dyer flowing 75 bbls. after a shot of acid. Helena Oil & Gas Co.'s No. 1 Jackson, SW SW Section 10-9-13, Converse area of Sabine Parish, reported last week, was formally listed as making 522 bbls. the first 24 hours flowing through tubing from 1,906 feet with the valve barely cracked. It slumped rapidly as do most Zwolle and Converse wells. W. F. Lacy's No. 1 Bowman-Hicks, NW SW Section 23-9-13, the farthest east well in the field, which it extended half a mile, swabbed and flowed 40 bbls. from 1,624 feet. In Union Parish, Nemours Corp. completed No. 2 Neal & Moore, SW NW Section 24-20-3e, gauging 5,774,776 feet of gas at 940 pounds rock pressure from 2,200 feet.

Graves & Ferguson's No. 1 Patterson, NE NE Section 31-19-16, Union County, Arkansas, scheduled to go 5,000 feet, was dropped from the list after being temporarily abandoned at 103 feet for the past several months. Eastman-Gardiner Interests' No. 1 Eastman-Gardiner, NE NW Section 29-9-16, Covington County, Mississippi, was similarly abandoned so far as field reports go, at 6,683 feet in chalk. Atkins & Hightower's No. 1 Overstreet, SW NE Section 26-6-1e, Hinds County side of the Jackson gas field, made an estimated 30,000,000 feet of gas from 2,485 feet, and J. A. Alexander's No. 2 Love Petroleum Co., NW SE Section 36-6-1e, Rankin County side, gauged 39,873,000 feet from 2,410 feet.

Eleven of the 18 new jobs listed during the week are in Louisiana, two in Arkansas, five in Mississippi and one in Panola County, Texas. Converse led the Louisiana list with four, Caddo three and one each in Caldwell, DeSoto and Grant Parishes and one in Zwolle district of Sabine. Arkansas' two new jobs were located in Union and Woodruff Counties; Mississippi's in the Jackson gas district, three in Hinds County and one in Rankin. These are:

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

North Louisiana

Company, well, farm name, section and block—	Remarks:
BIENVILLE PARISH	
Poole & Johnson's No. 1 H. E. Sudduth, 1,170 ft. E and S, C Sec. 28-14-16	Derrick.
BOSSIER PARISH	
J. A. King et al's (was A. W. Phillips, tr.'s) No. 1 Oden, 300 ft. W, 150 ft. N, SE cor. NW NW Sec. 4-18-13	S.D. 1,704 ft.
W. D. Ball's Hicks Grocery Co. (was Dr. C. R. Reed, tr.'s) No. 1 C.J.&B., Sec. 18-16-11	Cored gas sand 1,910 ft.
B. A. Sherrell, tr.'s No. 1 fee, NE NW NW Sec. 18-19-11	Drlg. plug 2,207 ft.
CADDO PARISH	
R. E. Davidson et al's No. 1 DeWitsey MacMillan, 500 ft. N, 330 ft. E, SW cor. Lot 16, Sec. 23-16-13	Location.
J. B. Hutchinson, tr.'s No. 1 Story Phillips, 330 ft. N and E, SW cor. SW NE SE Sec. 28-16-13	S.W. 1,046 ft.; arranging deepen.
J. T. Humphrey et al's No. 1 Powell, 330 ft. N and E, SW cor. NW SE Section 14-19-15	S.D. 1,200 ft.
John F. Kerper's No. 1 Barron, 350 ft. N and W, SE cor. NE SE Sec. 27-16-14	S.D. 3,162 ft.
A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SW SW Sec. 4-14-16	S.D. 226 ft.
CALDWELL PARISH	
Hartley et al's No. 1 Taylor, most southeasterly cor. Sec. 42-14-4e	Derrick.
CATAHOULA PARISH	
Geo. Greer et al's No. 3 La. Central Lbr. Co., 775 ft. E, 260 ft. S, NW cor. NE NE Sec. 2-9-6	Cmtd. 6-in. 900 ft.; ran 2½-in. tubing; swbng. to test.
DE SOTO PARISH	
Bailey Gantz et al's No. 1 Jenkins, NW cor. SE SW Sec. 35-13-12	Moving in heavy rig; T.D. 3,090 ft.
J. H. McKenzie's (was P. B. Dyer's) No. 2 B. F. Jenkins, 330 ft. N and E, SW cor. NW SW Sec. 35-15-12	Cmtd. 6-in. 2,430 ft.; S.D.; W.O.
Hirschfield-Bailey Interests' No. 1 Mickle, 660 ft. N and E, SW cor. SE Sec. 7-13-13	Drlg. chalk 1,720 ft.

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Caddo Parish: Dillingham and others' No. 1 Eady estate, SE NE Section 33-16-16, derrick; R. E. Davidson and others' No. 1 DeWitsey MacMillan, a wildcat in Lot 16, Section 23-16-13, a location for a 3,500-foot well on a block of 2,600 acres, and C. D. Whittaker and others' No. 2 Barker, Section 21-22-15, Hosston district, rig up. Hartley and others have derrick up for No. 1 Taylor in the most southeasterly corner of Section 42-14-4e, Caldwell Parish. Sebastian, Jr., has derrick up for No. 1 W. H. Hill in the NW SE Section 3-10-13, DeSoto Parish. This location is 400 feet from an old well that showed for production. When the well has been drilled to contract depth, regardless of results, the rig will be moved to this old location on which liner will be pulled and an effort made to make a producer of what appeared at the time to be a failure. L. L. Lindsey and associates have begun drilling No. 1 Edenborn estate, SW cor. SE SE Section 13-7-4, Grant Parish, 3 miles east of Aloah station and with 12½-inch set at 40 feet are making hole.

Crude Oil Runs

Daily average runs from the Louisiana-Arkansas fields were practically stationary with last week's total, the difference being only 97 bbls. on the down side. Louisiana runs totaling 25,795 bbls. were a gain of 115 bbls. but a decline of 210 bbls. in Arkansas runs which totaled 32,440 bbls. left the net at the loss stated. Runs from the several pools were:

NORTH LOUISIANA

Caddo light	4,520
Caddo heavy	1,490
Converse	725
Cotton Valley	450
DeSoto-Red River	1,580
Elm Grove	315
Haynesville	3,880
Holly	205
Homer	2,695
Pleasant Hill	255
Sarepta-Carterville	780
Urania	2,625
Zwolle	6,275
Total	25,795
Last week	25,680
Increase	115

ARKANSAS

Champagnolle	1,295
El Dorado	2,585
Limon	410
Miller County	482
Nevada County	640
Smackover light	2,575
Smackover heavy	21,225
Stephens	625
Urbana	3,600
Total	32,440
Last week	32,650
Decrease	210
Both states	58,235
Last week	58,330
Decrease	95

Converse District

In the Converse district of Sabine Parish Arrock Oil Co. has rig up for No. 1 Hewitt, NE SE Section 20-9-13. Helena Oil & Gas Co. has derrick up for No. 1 E. K. Harris, NE SW Section 10-9-13. J. E. Sedberry has derrick up for No. 1 E. K. Harris in NE SW Section 10-9-13. Stewart and others' No. 1 Latham, NW NE Section 22-9-13, began drilling September 25 and has 10-inch set at 68 feet. In the Zwolle district of Sabine Parish, C. T. Ruffin, trustee, set 10-inch at 97 feet on No. 1 McNeely, NE NE Section 7-7-11.

Arkansas' two new jobs were Charles Steel's No. 1 J. B. Combs, SW NW Section 25-18-16, Union County, west of old El Dorado South Field production and

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Continental Oil Company Leases 53,000 Acres in Driscoll Ranch, Southern Duval County

By B. D. STEVENSON
Staff Correspondent, Southwest Texas Fields

SAN ANTONIO, Tex., Oct. 2.—Purchase by the Continental Oil Co. of lease on the Driscoll ranch of 53,000 acres in southern Duval County is one of the biggest lease deals that has been turned in Southwest Texas in a long time. The west edge of the ranch is about 6 miles east of the Kohler Field in Duval County. On the ranch in the southeastern corner are three oil wells and several gas wells drilled a few years ago by the owner of the ranch, Robert Driscoll. The oil wells have produced a total of over 360,000 bbls. of oil.

Several major companies have attempted to obtain a lease on the tract in years past and have even tried to buy the fee but without success. The ranch is now owned by Mrs. Clara Driscoll Sevier, sister of the late Robert Driscoll. Consideration and terms of the lease contract have not been made public, but it is expected and understood there will be some development of the property.

Conway & Campbell's No. 1 Hoffman in the Sophie Hoffman Survey No. 114, which came in a wildcat gasser recently opening a new pool, is 8 miles north of the north edge of the Driscoll property.

There are four producing sands developed in the Driscoll Pool with a few wells in each. The shallowest has six small gas wells developed of 2,000,000 to 6,000,000 feet of gas, the total depth of the shallowest well being 516 feet and the deepest 608 feet. Four gas wells ranging from 15,000,000 to 60,000,000 feet were developed around 2,441-80 feet and one oil well at 2,475 feet.

Five other tests were drilled deeper, one at 2,955 feet for 75,000,000 feet of gas; one at 2,899 feet came in for 600 bbls. of oil; one at 2,895 feet for 875 bbls. of oil; one at 2,905 feet for 40,000,000 feet of gas and one at 2,988 feet made oil and water.

The Fayette, in which is the Cole sand, is logged at 2,800-3,080 feet on the Driscoll ranch and the deeper wells are therefore in that formation. The Cole sand, producing gas in abundance in the Cole Field about 15 miles southwest, is found at about 1,700 feet.

The Driscoll Pool covers about 240 acres, being about a half mile north and south and over three-quarters of a mile east and west, and all of the producers are in Sections 23 and 448. The Government Wells sand in the Driscoll Pool is estimated at around 3,500 feet, the Mirando sand at 3,700 feet, Pettus sand below 4,000 feet and Yegua at around 4,225 feet. No tests have been drilled that deep.

Continental Oil Co. is also interested in Eaton and others' No. 1 Herbst, a wildcat just starting, located 15 miles northeast of the north line of the Driscoll ranch.

Northern Duval County

Navarro Oil Co. completed its No. 18 Hahl, within 330 feet of the north line of the west half of Survey No. 360 at the extreme north end of the pool and at the limit of the Navarro's lease, and Magnolia Petroleum, which owns the acreage for a mile or two north of that, has made location for its No. 1 Duval County Ranch Co. in Survey No. 208, next north of the Navarro acreage. For most of this year the north line of the field has been creeping farther north one location at a time with the Humble offsetting the Navarro's wells in the east half of Survey No. 360.

De Soto Oil Co.'s No. 2 Wood-Welder, in Survey No. 211, 2¾ miles northeast of nearest production in the field and 660 feet east of No. 1 Wood-Welder, which made a small gas well in the Government Wells sand, is standing at 2,156 feet after plugging back from 2,502 feet but has not been able to make a well and it looks like the north line of the field was somewhere in about that region. Sun's 7-bbl. well in the Government Wells sand, abandoned as not being commercial, is a mile west of De Soto.

At the south end of the North Government Wells Field, Edgington abandoned his test in the southeast corner of Survey No. 48, which puts limitations on the extension of the field in that direction. Smith & Story's No. 5 Lundell, a little fartrer north than Edgington and located 150 feet from north and east lines of the south half of southwest quarter, late in the week was down nearly to the sand depth and this week will probably tell whether it is to be a producer.

Navarro Oil Co. completed four oil wells in the north end of the field the past week, all except No. 18 being inside locations and all of them from 20 to 40 bbls. per hour on choke.

Wildcat Play

For the past year or more there has been wildcat endeavor to pick up another pool north of the North Government Wells Pool. Within the past two weeks there has been a keen new interest making it look as though someone thinks he has found the key to the situation. Three new locations are announced north of the North Government Wells Pool in addition to five announced a month or so ago, four of which are getting started drilling. All of the new tests are on the Hagist ranch.

Trinity Drillers made one of the locations in the B.B.B.&C.R.R. Survey No. 1 due north of the field and up next to the south line of McMullen County, 7 miles north of the field. Danvers & Harrison made location for another in Survey No. 265 a mile southeast of Trinity Drillers, and Walter Goldston made location for another in R. Mills Survey No. 467 about 3 or 4 miles northeast of Trinity Drillers.

This stretch of the country will be the hot spot for the next few weeks at least till the final returns begin to come in. Of the other five locations in this territory Al Buchanan in Survey No. 206, 4 miles north of the field and in Duval County, spudded in last week; Paul C. Teas' No. 1 Hagist in Survey 181, 10 miles north of the field was down a few hundred feet drilling at the close of the week; Whisenant & Trenchard's No. 1 Martin, 2 miles west of Teas was down below 1,500 feet and drilling; C. B. Bunte, Inc.'s No. 1 Lowe, 3 miles northwest of Teas, was about ready to spud in and Teas' No. 2 Hagist, 5 miles north of his No. 1, is a location only.

The great bulk of the interest in wildcatting in the Laredo district has lately been in the north end of Duval County and following the Government Wells trend. With the acquisition of the Driscoll ranch lease by the Continental company considerable interest will be directed to this trend to the east of the Government Wells trend. Continental, as already mentioned, is interested in Eaton and others' No. 1 Herbst in Survey No. 71, now getting ready to spud in, several miles northeast of the new Conway & Campbell gas well over 15 miles north of the north line of the Driscoll ranch and more than 20 miles north of the Driscoll Field.

Starr County

It looked like Sun Oil Co. would make a producer out of its No. 4-A Guerra, the farthest east location in the new Cuevitas Pool in northwestern Starr County, in sand at 2,253-63 feet and the company made location for the No. 5-A a little north of No. 4-A. No. 4-A Guerra was being completed at the close of the week.

In the new pool opened by Jeffries-Lambeth Drilling Co., 9 miles northeast of the Rio Grande City Pool the first test since Jeffries-Lambeth's No. 1 Starr County Cattle Co. came in as a big gasser at 2,450-55 feet, is a dry hole. It is Shankle's No. 1 M. M. Garcia in Porcion 90, a mile north and slightly east of the discovery well. Total depth is 3,011 feet where it is abandoned. The next to get down will probably be Harrison's No. 1 M. M. Garcia, a mile east and a little south of the discovery well. It was down several hundred feet at the close of the week, and Goodwin & Yantis' test on the Kelsey Bass land 2 miles northwest was also down several hundred feet and making hole.

Scarp Oil Co.'s (DeWitt) No. 1 Lopez, in Jim Hogg County, 8 miles northwest of Sun's new pool in northwestern Starr and the only wildcat playing that trend at this time, is reported below 2,400 feet which is evidently getting a little deep for the Sun's sand.

Balcones Fault Zone

Only a few tests are exciting interest along the Balcones this week. Webster's No. 1 Fulps in Caldwell County southwest of the Dale Field at 2,351 feet is still working to find out if the hole is crooked. If the hole is straight it is getting too deep. If the hole is deflected much it still has a chance at the Edwards lime.

Boler's No. 1 Milburn, in Bexar County, will probably with good luck reach Edwards lime depth this week or early next. It is being drilled because of the good looking core taken from No. 1 Kearney a quarter of a mile east of it.

In Bastrop, Marts & Beavens' No. 4 Reyes, in the new Cedar Creek Field, is a failure. It is one location or a little more east of the two producers that constitute the field and the company has now made location for No. 5 which is north of the two producers.

Cole Petroleum Co. has made location for No. 1 Cole in the R. Gage Survey west of the two producers. This is the first wildcatting Cole has done outside of the Laredo district.

Hardy Sitton, who has had a long fishing job in No. 1 Evans in Blanco County, is drilling again at about 720 feet.

Wildcat Operations in Southwest Texas

Week Ending September 30

Company, well, farm name, section and block—	Remarks:
ATASCOSA COUNTY	
E. C. Burton's No. 1 Smith-Mowinkle, 2,100 ft. from N line, 200 ft. from W line of F. Perez Sur. No. 172.	T.D. 819 ft.; standing.
Texio Oil Co.'s No. 1 Reiffert & Frobese, 440 ft. SE along railroad from SE cor. of Blk. 55 of Catalina Hoey Sur. and 390 ft. SW at right angle in Juan Houlihan Sur.	T.D. 690 ft.; coring.
BASTROP COUNTY	
J. E. Emanuel's No. 1 H. Klemm, 311 ft. from W line, 300 ft. from S line of tract in R. S. Teal Sur.	T.D. 850 ft; standing.
Ca-Tex O. & G. Dev. Corp.'s No. 1 Pendergrass, 1,343 ft. from NE, 310 ft. from SE line of 130-ac. tract in Henry Warnell Sur.	Rigged up and S.D.
Three Oil Co.'s No. 1 M. Ingram, 1,250 ft. from SW line, 940 ft. from SE line of tract in M. Morgan Sur.	Derrick.
BEE COUNTY	
Grisham et al's No. 1 Powell, 900 ft. N, 500 ft. W of SE cor. of J. A. Reed Sur.	Spudded in.
Holland Oil Co.'s No. 1 Copeland, NE cor. of 400-ac. tract in Pace Sur.	T.D. 900 ft.; drlg.
W. F. McLain's No. 1 Weiss, 400 ft. E of line between E. S. Price's Nos. 1 and 2 Weiss	Rigging up.
BELL COUNTY	
Gus Winston et al's No. 3 Warrick, 100 ft. N of James Scoggins' No. 1 Warrick, in Elijah Ingram Sur.	T.D. 1,312 ft.; fishing.
R. S. Wilson's No. 1 Davenport, 200 ft. from W line, 700 ft. from S line of J. L. Herred Sur.	T.D. 1,235 ft.; standing.
BEXAR COUNTY	
C. I. Albertson's No. 2 C. Hoke estate, 675 ft. from E line, 250 ft. N of Medina River in Jose Maria Barrera Sur.	T.D. 44 ft.; standing.
F. J. Von Deiden et al's No. 1 Frank Webber, 150 acres in J. Montez No. 6	T.D. 100 ft.; set 8-in. csg.
Dingman's No. 1 Cassin, 175 ft. from N, 130 ft. from W line of 1,250-ac. tract in Rodriques Sur.	T.D. 1,506 ft.; resumed drlg. to make wtr. well.
Austin Hull's No. 1 Classen, 268 ft. from W line, 2,500 ft. from S line of tract, 12 miles N of San Antonio.	T.D. 1,810 ft.; standing.
LaSalle Oil Co.'s No. 1 City Sewage farm, 150 ft. S of Rilling Road, 450 ft. W of NE cor. of tract in D. Bustillos Sur.	T.D. 75 ft.; standing.
C. J. LeCompte's No. 4 R. Diaz, 324 ft. NE of No. 1	T.D. 320 ft.; S.D.
Motes-Campbell's No. 1 Pruitt, 550 ft. NE of Trussells' No. 1 Pruitt, 54 varas from E line of tract in Samuel McCullough Sur.	T.D. 1,065 ft.; T.A.
Motes-Campbell's No. 1 Stumberg, 990 ft. from N line, 450 ft. from W line of F. Rolen Sur. No. 48	T.D. 1,135 ft.; standing.
Motes-Campbell's No. 2 Stumberg, 450 ft. from N line, 450 ft. from W line of S. Stumberg 140-ac. tract in F. Rolen Sur. No. 48	T.D. 597 ft.; drlg.
George L. O'Neill's No. 1 Neimann in Juan Montez Sur. No. 6	T.D. 530 ft.; drlg.
Fred Perrenot's No. 1 Ruiz, SE cor. of 82-ac. tract in F. Rowland (Rolen) Sur. No. 48	T.D. 700 ft.; sandy shale.
Fred A. Perrenot's No. 1 Russell, 750 varas from NE line, 54 varas from NW line of 500-ac. tract in Rodriques Sur.	T.D. 1,315 ft.; standing.

(Continued on Page 61)

Kansas Producers Are Given Added Allowable Crude Oil Production; Dull Week in Field

By JAMES McINTYRE

Kansas producers had cause to be thankful in the past week, as on top of an 11-cent advance in the crude oil market, the State was allowed an increase of 5,000 bbls. per day in production by the government oil administrators. The new allowable was placed at 116,000 bbls. per day. This is said to be below purchaser demand, but the oil administration bases its allowable on consumer demand and must be shown that there is such demand large enough to warrant a greater allocation to Kansas before any change will be made.

It was a somewhat dull week in the field. Completions were below the average for recent weeks and new work was also at a lower ebb than usual.

Production of Pools

Following is the estimated average daily production of some of the more prominent pools and fields in Kansas in the week ending September 30, and the previous week:

Pool or field—	Sept. 30	Sept. 23
Hollow	11,405	13,100
Ritz-Canton	18,795	19,215
Voshell	6,175	6,290
Sedgwick County	9,640	9,775
Nikkell	4,175	4,155
Ellsworth County	4,658	5,037
Rice County	6,496	7,823
Barton County	530	567
Reno County	2,302	2,115
Ellis County	886	828
Kingman County	643	653
Stafford County	557	565
Greenwood County	11,400	11,250
Butler County	17,800	18 100
Other pools	26,123	27,662
Total	121,635	127,135

McPherson County

Stanolind Oil & Gas Co. & Amerada Petroleum Corp.'s No. 5 Zerger, SE NE SE Section 16-21-3w, McPherson County, was shot with 20 quarts at 3,400-29 feet, Wilcox sand, and swabbed 14 bbls. per hour.

J. E. Mabee, Inc., & Shell Petroleum Corp.'s No. 3 Klassen, SW NW SE Section 33-21-3w, swabbed 346 bbls. in 14 hours from Hunton lime at 3,466-70 feet.

McBride, Inc.'s No. 1 Koehn, NE cor. Section 33-21-3w, was treated with 1,000 gallons of acid at 3,431-43 feet and later pumped 215 bbls. in 24 hours.

Marileen Oil & Gas Co. and others' No. 2 Munn, SW cor. Section 6-20-1w, was given a 1,000-gallon acid treatment in Viola lime at 3,396-3,401 feet and swabbed and pumped 200 bbls. of oil and salt water in 24 hours.

Lario Oil & Gas Co. and Shell Petroleum Corp.'s No. 5 Miller, SE cor. Section 24-19-2w, had pay at 3,414-19 feet. It was acidized and pumped 360 bbls. in 24 hours. It was completed.

Youker and others' No. 4 Eaton, SE NW NE Section 26-19-2w, pumped 110 bbls. of oil and 20 bbls. of water from pay at 2,924-44 feet. It was completed.

Dickey Petroleum Co. and Shell Petroleum Corp.'s No. 4-B Decker, SE NW SE Section 35-19-2w, pumped 55 bbls. of oil and 20 bbls. of water, after an acid treatment at 3,385-3,404 feet.

Vernon Oil & Gas Co. & Shell Petroleum Corp.'s No. 2 Drumm, NW cor. NE Section 35-19-2w, was deepened from 2,929 feet to 3,306 feet. It produced 45 bbs. naturally in 18 hours from Viola lime at 3,385-96 feet, and may be acidized.

Roth & Faurot have rig up for No. 1 Almen, NE NW SE Section 13-19-3w. McPherson Oil & Gas Co. & Shell Petroleum Corp. will deepen No. 2 Fleming, C NW NW Section 11-19-2w, old total depth 2,947 feet; Abex Oil Co. is drilling a shallow gas test. No. 1-A Knudson, SE SW SW SE Section 23-19-2w. Breslin and others have rig up for No. 2 Flock, SE NE NW Section 35-19-2w. Olson & Shell Petroleum Corp.'s No. 4 Johnson, NW SW SE Section 36-19-2w, was drilling at 547 feet.

Stafford and Barton Counties

Stanolind Oil & Gas Co. has a rig up for No. 2 Richardson, SE NE SE Section 36-22-12w, Stafford County. Atlantic Oil Producing Co. is rigged up on No. 1 Willinger, C NE NE Section 18-22-11w, Barton County, a wildcat.

Harvey County

Sinclair Prairie Oil Co.'s No. 1 H. Schroeder, NW cor. NE Section 4-22-3w, Harvey County, swabbed 457 bbls. in 12 hours from Hunton lime at 3,502-06 feet. It may be acidized.

Derby Oil & Refining Co.'s No. 4 Schmidt, NE SW NW Section 17-22-3w, was plugged back from 3,647 feet to 3,490 feet. It swabbed 2½ bbls. of oil and water per hour.

Hollow and others treated No. 3 Schmidt, SW NE NW Section 17-22-3w, with 1,000 gallons of acid, but it had not been tested. The well had showings of oil from 3,432-52 feet, total depth, and had swabbed 113 bbls. of oil in 13 hours.

Sinclair Prairie Oil Co.'s No. 3 Neufeldt A, SE cor. Section 18-22-3w, has pay at 3,460-66 feet, base of the Hunton lime at 3,470 feet. It swabbed 495 bbls. of oil in 17 hours. Same company's No. 3-B Neufeldt, SE NE NE Section 18-22-3w, swabbed 120 bbls. in 12 hours from Hunton lime at 3,389-3,423 feet.

Mid-Kansas Oil & Gas Co.'s No. 7 Duerkson, NE SE SW Section 19-22-3w, swabbed 115 bbls. in six hours from pay at 3,453-63 feet.

Sinclair Prairie Oil Co.'s No. 2 Ediger, SE NE SW Section 19-22-3w, was shot with 15 quarts of explosive at 3,527-47 feet and swabbed 780 bbls. in 24 hours. It was completed. Same company completed No. 3 Neufeldt, NE SE SW Section 19-22-3w. It has pay at 3,350-54 feet. The well swabbed 730 bbls. in 16 hours.

Hollow and others were rigging up rotary for No. 1 Bartel, SW cor. SE Section 36-22-4w. Gypsy Oil Co. was rigging up rotary for No. 1 Friesen, NE NW NE Section 18-22-3w. Harris & Haun and Phillips Petroleum are moving in material for No. 1 Cone, C NW Section 31-22-3w.

Rice County

Phillips Petroleum Co. & Twin Drilling Co.'s No. 3 Miller, C W half SE NE Section 3-21-6w, Rice County, flowed 90 bbls. in 24 hours from pay at 3,380-85 feet and was completed.

In the Chase townsite field in Rice County there were no completions. Ramsey and others have rig up for No. 1 Lansing, Block 30, SE cor. NE Section 31-19-9w, and have made location for No. 1 McFarland, Block 2, SW NE SE Section 31-19-9w.

Kingman County

Skelly Oil Co.'s No. 1 Ratcliff, CEL NW Section 30-27-10w, Kingman County, which was treated with 1,000 gallons of acid at 3,425-36 feet, flowed 720 bbls. in 16 hours and on the following day flowed 388 bbls. in 18 hours. Same company has rig up for No. 2 North Miles, CWL SE Section 19-27-10w, and had standard tools rigged up to finish No. 1 Interurban Realty Co., CNL SW Section 30-27-10, total depth 3,417 feet. Same company acidized No. 3 F. C. Miles, CWL NE Section 30-27-10w, at 3,427-35 feet, but had not tested.

Sedgwick and Butler Counties

Wentz and others have material moved in to start No. 1 Stockamr, SW cor NE Section 31-26-2w, Sedgwick County.

Hartman and others' No. 1 McCann, SE SW NW Section 7-25-3e, Butler County, a wildcat, which was acidized in chat at 2,785-97 feet, pumped 50 bbls. of oil and 192 bbls. of water in 24 hours. It may be acidized again.

Greenwood County

Ward McGinnis' No. 1 Wilson, SE cor. Section 29-23-11, was shot with 60 quarts at 1,885-1,907 feet and pumped 14 bbls. in 24 hours.

F. G. Holl and others' No. 1-A Voorhees, NE SW SE Section 1-22-11, was dry and abandoned at 1,877 feet.

Bailey and others' No. 1-A Elrod, SE NE NW Section 7-22-12, was a hole full of water at 1,895 feet and was abandoned.

Harper and others' No. 5 Figg, C E half SE SW Section 28-23-14, Woodson County, had 400 feet of oil in the hole from sand at 1,636-49 feet, and Theta Oil Co.'s No. 7 Schaffer, SE NW NW SE Section 31-23-14, had 500 feet of oil in the hole from 1,659-74 feet.

Beska, Baker and others have started drilling No. 1 Ballinger, SW NE Section 24-25-11, Greenwood County. Bisagno and others were drilling at 325 feet in No. 7-A Gilroy, SW SE NE NE Section 6-25-13. Cross & Field were drilling below 200 feet in No. 2 Mason, NW cor. SW Section 14-26-14.

Wildcat Operations in Kansas

(Descriptions are East unless marked otherwise)

Company, farm and location—	Remarks:
BARTON COUNTY	
Atlantic O. P. Co.'s No. 1 Schneider, C NE SW Sec. 15-20-13w	Drlg. 1,010 ft.
Helmerich & Payne's No. 1 Everleigh, C SW SE Sec. 13-18-13w	Fishing; T.D. 2,330 ft.
Skelton et al's No. 1 Ott, C SE SE Sec. 16-19-14w	O.W.D.D.; T.D. 3,706 ft.; in granite; S.D.
RUTLER COUNTY	
Hartman et al's No. 1 McCann, SE SW NW Sec. 7-25-3	Acidized 2,791-2,801 ft.; pumped 50 bbls. oil and 192 bbls. wtr. in 24 hrs.
COWLEY COUNTY	
E. Yarnell's No. 1 Speer, SE NE NE Sec. 31-33-6	S.D. 1,800 ft.
Van Meter et al's No. 1 Moore, NE cor. Sec. 5-35-4	Location.
DICKINSON COUNTY	
Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1	Spudded and S.D.
EDWARDS COUNTY	
Atlantic Oil Prod. Co.'s No. 1 Bradbridge, C SE NW Sec. 1-24-16w	Drlg. 1,657 ft.
FINNEY COUNTY	
National Ref. Co. et al's No. 1 Smith, C SE SW Sec. 2-23-29w	Rigged up; S.D. for wtr.
GEARY COUNTY	
Ledauris' No. 1 Fechner, C SE NE Sec. 27-13-8	S.D. 967 ft.
HARVEY COUNTY	
Holbart Oil Co.'s No. 1 Harder, SE SW SE Sec. 11-23-1e	Drlg. 2,205 ft.
L. H. Wentz' No. 1 Bestvater, SW SE SW Sec. 8-22-1e	Set 10-in. csg. 2,489 ft.
KINGMAN COUNTY	
D. R. Lauck et al's No. 1 Church, SE SW NE Sec. 10-28-6w	Drlg. 4,185 ft.
Olson and Skelly Oil Co.'s No. 1 Emery, C SW NW Sec. 22-25-6w	Drlg. 2,100 ft.
Regina O. & G. Co. et al's No. 1 Wilson, NW NE Sec. 26-25-5w	Drlg. 2,296 ft.
MARION COUNTY	
Holbart Oil Co.-Shell Pet. Corp.'s No. 1 Gingras, NE SW Section 8-24-1e	Drlg. 1,380 ft.
McPHERSON COUNTY	
Sever and Hessman's No. 1 Scrag, 8¼ SE Sec. 22-19-4w	Abd. location.
Regina O. & G. Co.'s No. 1 Vogts, C SE SE Sec. 8-20-1w	T.D. 2,910 ft; straightening hole.
Roth & Faurot's No. 1 Swanson, NE SW NE Sec. 13-19-3w	Rig.
Jim Madison's No. 1 Boesker, SE NW Sec. 29-20-1w	Spudded.
Paramount Oil Co.'s No. 1 Steinkirchner, NE SE SE Sec. 25-19-1w	Drlg. 2,338 ft.
RENO COUNTY	
Watchorn O. & G. Co.'s No. 1 Soper, C NE NE Sec. 31-25-4w	Dry and abd. 4,045 ft.
Mylius et al's No. 1 Patton, SE NE Sec. 35-23-5w	Drlg. 3,568 ft.
Roth & Faurot's No. 1 Yoder, C NW NW Sec. 15-24-5w	Crooked hole; S.D.
RICE COUNTY	
Atlantic Oil Prod. Co.'s No. 1 Brandenstein, C SE SE Sec. 10-19-10w	Location.
El Dorado Ref. Co.'s No. 1 Wernet, SW NE Sec. 12-20-6w	Rig timbers in.
Garden et al's No. 1 Thodel, C NW NW Sec. 11-21-7w	T.D. 3,280 ft.; swbd. 23 bbls. in 1 hr.
STAFFORD COUNTY	
Atlantic Oil Prod. Co.'s No. 1 Willinger, C NE NE Sec. 18-22-11w	Spudding.

GEOLOGIST STRICKEN

SAN ANTONIO, Tex., Sept. 29.—Stricken with paralysis in a small Mexican village southwest of Brownsville and cut off from the outside world by storms and floods for three days, Stanley Say, 38, oil geologist, was brought to San Antonio for medical treatment in the air ambulance in a serious condition.

Mr. Say was a geologist for the Mercedes Oil Corp., a subsidiary of the Standard Oil Co., at San Fernando, Mexico, 90 miles southwest of Brownsville and high up in the hills. He was stricken with paralysis either as a result of a recent fall or from a wound he sustained in the World War. A friend volunteered to make the trip to Matamoros on horseback to summon aid. It took him three days.

SHAWNEE GEOLOGISTS ELECT

The Shawnee (Okla.) Geological Society at its first meeting of the year elected Robert Brown, Amerada Petroleum Corp., as president; Buddy Clark, Gypsy Oil Co., vice president, and Ray Youngmeyer, Amerada, secretary-treasurer. Retiring officers were J. T. Richards, Gypsy Oil Co., president; H. M. Russell, Sinclair Prairie Oil Co., vice president, and H. C. Arnoll, Barnsdall Oil Co., secretary-treasurer. R. A. Laughlin of Oklahoma City addressed the geologists on "The NRA and Its Application to the Oil Business."

Oklahoma's Reduced Production Is Allocated; Oklahoma City Bearing the Brunt of Cut

By JAMES McINTYRE

The Oklahoma Corporation Commission, on Saturday, September 30, allocated the production of Oklahoma for the month of October. The Federal oil administration in cutting the allowable marketable production of the United States to 2,337,500 bbls. per day (of which 95,000 bbls. is to come from storage), fixed Oklahoma's quota at 495,000 bbls. per day, of which 25,000 bbls. may be taken from storage. The Corporation Commission made the distribution of allowable crude oil as follows:

The order, effective at 7 o'clock Sunday morning, October 1, permits stripper wells to continue producing to capacity, estimated at 179,995 bbls. daily, and limits daily production from all prorated areas to 315,005 bbls.

Other daily allowables are:

Oklahoma City area, Wilcox zone, 135,071 bbls.; Simpson, below Wilcox, 52,330 bbls.; fault line, 506 bbls.

Class B pools—Seminole and others, 70,501 bbls.; Maud, 1,521 bbls.; St. Louis, 18,489 bbls.; Asher-Wanette, 2,027 bbls.; Konawa, 2,409 bbls.; Sasakwa, 1,051 bbls.; Allen, 8,588 bbls.; Sasakwa townsite, 1,009 bbls., and Calvin sand of East Earlsboro, 3,021 bbls.

Class C pools—Lucien, 5,976 bbls.; Fish, 2,805 bbls.; Tatums, 7,844 bbls.; Keokuk Falls, 747 bbls., and Simpson sand of Fish, 360 bbls.

Class D or wildcat pools, County Line, 550 bbls.; Crescent, 50 bbls., and Orlando, 150 bbls.

One-seventh of the allowable production for the Oklahoma City Field is allocated to underage and underproduction.

The Corporation Commission also issued an order relative to the productive zones in the Oklahoma City Field. Wells in the Wilcox sand zone making 3 per cent or more of water are to be classed as "water wells." The section of the old order which required wells to shut down as soon as they had taken new potential tests was eliminated from the new order. Decline curves may be applied to wells naturally flowing through tubing; also to water wells and to offsets to water wells.

Wells in the Wilcox sand zone are divided, according to gas-oil ratio, into classes. Wells with a ratio of not more than 5,000 feet of gas per barrel of oil may produce their full allowable. Wells making 10,000 feet of gas per barrel of oil may produce only half of their allowable, and with this as a basis, wells ranging from 5,000 to 20,000 feet of gas per barrel of oil may produce proportionately. Deferred production credits will be listed on the balance of the allowable which may be made up later if the gas-oil ratio declines.

The commission made strict rules as to filing production reports and made provisions for permits for reconditioning wells.

Allowables by Fields

New allowables in outside fields, with the percentage of flow and present potentials, by districts, are as follows:

Field—	Allow.	Pct.	Pot.
Seminole (A)	70,501	38	181,759
Maud	1,521	64	2,395
St. Louis	18,549	31	57,838
Asher-Wanette	2,027	60	3,366
Konawa	2,409	45	5,304
Sasakwa	1,051	60	1,741
Allen	8,588	45	19,117
Sasakwa Twp.	1,009	21	4,829
Calvin (Eb)	3,021	35	8,489
Total Class B	108,616		284,829
Lucien	5,976	15	49,769
Fish	2,805	13	21,437
Tatums	7,844	22	35,228
Keokuk	747	32	2,301
Fish (Simp.)	360	37	964
Total Class C	17,732		109,699
County Line	550	(50-bbl. well)	
Crescent	50	(50-bbl. well)	
Orlando	150	(50-bbl. well)	
Total	750		

In the Oklahoma City area, one-seventh of the total allowable is allocated to underproduction and stocks above connections as of October 1. This allocation was made because of the confusion growing out of issuance of the Federal quota order after the September state order had become effective.

Operators are required to report to the umpire's office the amount of underproduction and stocks on October 1, and a permit to run the allowed one-seventh will be issued. Reports are to be made on a special form.

Some producers and purchasers in Oklahoma are strongly objecting to the Oklahoma allowable, because, they say, it is below actual crude oil demand by purchasers. Samuel W. Hayes, attorney and a code committeeman, told the Corporation Commission that if Oklahoma is to get a larger quota, producers and purchasers must prove that there is a consumer demand large enough to warrant an increase in the State's allowable.

"The committee is giving no attention to nominations made by purchasers down here," Mr. Hayes said. "They are looking at the consumptive demand, which is that amount of oil taken for immediate processing and the final disposition of the products."

Plans were being formulated to start a survey on all crude produced in the State to determine where it is being processed and how much of the excess crude and refined products are being handled. This will require checking of refinery runs, storage and pipe line runs in more than a dozen states of the Middle West and Southwestern territory.

Production of Pools

Estimated average daily production in Oklahoma in the week ending September 30 and for the previous week was as follows:

Field or pool—	Sept. 30	Sept. 23
Allen	9,930	11,375
Bowlegs	10,550	13,420
Bristow-Slick	11,150	11,150
Burbank	9,600	9,700
Lucien	7,645	6,825
Carr City	5,815	8,250
Earlsboro	10,130	11,220
East Earlsboro	14,490	18,225
South Earlsboro	1,510	1,810
Little River	14,500	18,725
East Little River	990	1,120
Oklahoma City	212,500	235,855
Seminole City	9,635	12,385
East Seminole	1,350	1,565
Searight	2,405	2,980
Maud	1,600	1,640
Mission	5,250	5,545
Cushing-Shamrock	13,000	13,000
St. Louis-Pearson	23,915	30,100
Tatums-Tussey	8,950	9,000
Sholem Alechem	5,475	5,350
Other pools	147,380	149,295
Total Oklahoma	527,670	573,545

In the Crescent Area

Much interest is being taken in the Gypsy Oil Co. and Carter Oil Co.'s test on the Walker farm, in Section 33-17-4w, in the Crescent Field in Logan County, which will be drilled in, it is believed, within the next week. Other wells in the field are making drilling progress but are not so far advanced as Gypsy-Carter test above mentioned. This pool has a 5,000-bbl. well shut in. It also is owned by the Gypsy and the Carter Oil companies.

Greater Seminole Field

The Carter Oil Co. and others' No. 1 Ray, C W half NE NE Section 23-11-6e, Keokuk Falls area, Seminole County, a test which found Wilcox sand at 4,531-38 feet early in the month of September and swabbed 438 bbls. in seven hours, has had several swabbing tests since. It produced 1,937 bbls. of fluid in 24 hours, 6 per cent of which was water, and later swabbed 88 bbls. per hour, the water content dropping to 4 per cent. A little over 2 miles north of the Carter well is the test of Sinclair Prairie Oil Co. and others' No. 1 Terney, SE cor. Section 2-11-6e. This well had Wilcox sand at 4,592 feet and cored dry from 4,593 to 4,606 feet. The top of the Wilcox is 60 feet lower than in the Carter well and on all the formations from Woodford down were from 60 to 70 feet lower than in the Carter test. The crew was still coring in the Sinclair Prairie test when this report was filed. The Carter Oil Co. and others in No. 1 Canard, C S half SW SE Section 35-11-6e, about 2½ miles south of the test in Section 23, was again tested in the past week made 427 bbls. of oil and 50 bbls. of water in 24 hours. This well is a Hunton lime producer. It had been drilled to below the second Wilcox, topped at 4,454 feet, total depth 4,488 feet, but was plugged back to 4,082 feet. The first and second Wilcox sands showed no oil in quantity.

In the Earlsboro area Sinclair Prairie Oil Co.'s No. 1 Davis, NE NW NW Section 13-9-5, an old Wilcox sand well, plugged back to 3,600 feet, the 8-inch casing was ripped at 3,524-35 feet, and the hole filled with water. It was ripped again at 3,410-15 feet, and there was more water. Sand at 3,400-14 feet was shot with 50 quarts, and the well made 75 bbls. of oil. The same company plugged back in No. 2 Calkins, SW NW SW Section 17-9-6, in the old Seminole City Pool and was testing a formation at 2,780-95 feet where there was a showing of oil and gas.

Marydon and others planned to acidize No. 1 Brandenburg, SE NE SE Section 34-8-4, Pottawatomie County, which swabbed 20 bbls. at 3,830 feet.

Spears Drilling Co. made a gas well of No. 1 Hart, NW NE SW Section 18-8-7, in the East Little River area. It made 5,000,000 feet of gas at 3,240-45 feet. This well started last June at 500 bbls. of oil per day from Cromwell sand.

Good Wells in South St. Louis

In the south extension of the St. Louis Pool in Pottawatomie County, Hall & Briscoe's No. 1 Brown, SW cor. NW Section 33-7-4, swabbed and flowed 1,465 bbls. in 19 hours in a test in the past week. It is a dolomite producer with oil at 4,193-4,200 feet. The same company's No. 2 Brown, NW SW NW Section 33, was drilling at 3,740 feet. Turman and others' No. 1 Ward, SE cor. NW Section 33-7-4, was being rigged up with standard tools to complete. It was at a total depth of 4,114 feet.

In the West Holdenville area Winona Oil Co. and Jarvis & Holm's No. 1 Campbell, 330 feet north and 1,180 feet east of SW cor. Section 20-7-8, swabbed and flowed 102 bbls. on a 24-hour test. It had been plugged back to 2,865 feet. The well had been drilled to 4,236 feet, and acidized in dolomite with little result.

In the Asher area in Pottawatomie

Wildcat Operations in Oklahoma

Northern Oklahoma

ALFALFA COUNTY

Company, farm and location— Remarks:

Acre et al's No. 1 Acre, C SW NE Sec. 14-24-11w.....Drlg. 6,035 ft.

BECKHAM COUNTY

Mid-Texas' No. 1 Sidell, SE SW SW Sec. 17-9-22w.....C.O. 2,500 ft.

Pattee Royalty Co.'s No. 1 Goose Tree, SW SE SW SE Sec. 33-10-23w .....T.D. 3,965 ft.

CADDO COUNTY

Denver P. & R. Co.'s No. 1 Noe, NW SW SW Sec. 34-10-10w .....S.D. 9,540 ft.

COAL COUNTY

Dodd & Burton's No. 1 Grigsby, NW SE NE Sec. 35-1-8..Shot 5 qts.; 1,000 ft. oil in hole.

Funk & Russell's No. 1 Miller, SE NE Sec. 10-2-8 .....Fishing 2,750 ft.

GARFIELD COUNTY

J. H. Lewis' No. 1 Clark, C NW NW Sec. 24-21-4w .....Drlg. 4,005 ft.

HUGHES COUNTY

Dixie-Lee Oil Co.'s No. 1 Taylor, C NW Sec. 27-5-10.....Drlg. 350 ft.

Pioneer Pet. Co.'s No. 1 Brock, SE cor. Sec. 25-5-11 .....Spudded in and S.D.

Redwine et al's No. 1 Badger, C N half SW SW Sec. 4-5-11 .....S.D. 230 ft.

Scruggs et al's No. 1 Black, NE Sec. 13-9-10 .....Rigging up.

KAY COUNTY

Blauner et al's No. 1 Maple, NE NW SE Sec. 20-27-4....T.D. 3,343 ft.; may abd.

Morgan et al's No. 1 Bush, NW NE NE Sec. 25-28-4....U.R. 10-in.; T.D. 1,815 ft.; S.D.

Burton Lewright et al's No. 1 Leseman, SW NE SE Sec. 4-28-2 .....Rig.

KIOWA COUNTY

Christian's No. 1 Jones, NE NW Sec. 4-7-18w .....S.D. 1,904 ft.

McWhirter et al's No. 1 Vanderneck, NE NW Sec. 3-7-19w (O.W.D.D.) .....S.D. 2,155 ft.

LINCOLN COUNTY

Amerada Pet. and Stanolind O. & G. Co.'s No. 1 Martinek, NW SE Sec. 35-13-5e .....Cellar.

Amerada Pet. Co.'s No. 1 Long, C NW NW SW Sec. 12-13-6 .....S.D. 3,670 ft.

MARSHALL COUNTY

Robb et al's No. 1 Vittitoe, NE SE Sec. 11-5s-4e.....Rigging up rotary tools.

MURRAY COUNTY

A. E. Harden's No. 1 Sadler, NE Sec. 19-1-2.....Rig.

T. E. Revells et al's No. 1 Wolfe, NE cor. Sec. 18-1-2...Drlg. 400 ft.

MUSKOGEE COUNTY

J. S. Routt et al's No. 1 Escoe, CWL SE NE Sec. 17-13-17 Drlg. 905 ft.

OKLAHOMA COUNTY

Houston et al's No. 1 Ketcham, CSL NW NE SE Sec. 32-14-3w .....Drlg. 5,115 ft.

Mid-Continental Oil Co.'s No. 1 Edwards, C SE SE Sec. 19-11-1 .....S.G. 3,160-80 ft.; S.D. 3,341 ft.

H. E. Rapp's No. 1 Price, CEL NE SW Sec. 19-14-3w....Wilcox sand 5,684-92 ft.; set 6-in. pipe 6,463 ft. in dolomite; 4,000 ft. fluid in hole.

F. Russell's No. 1 Heapley, SW NW NE Sec. 23-12-3w..T.D. 6,700 ft.; flowed by heads; 15 bbls. oil, 5,000,000 ft. gas.

PAYNE COUNTY

Kemp & Nunnelee's No. 1 Crane, SW SE SW Sec. 10-17-6 Set 6-in. csg. at 3,348 ft.

(Continued on Next Page)

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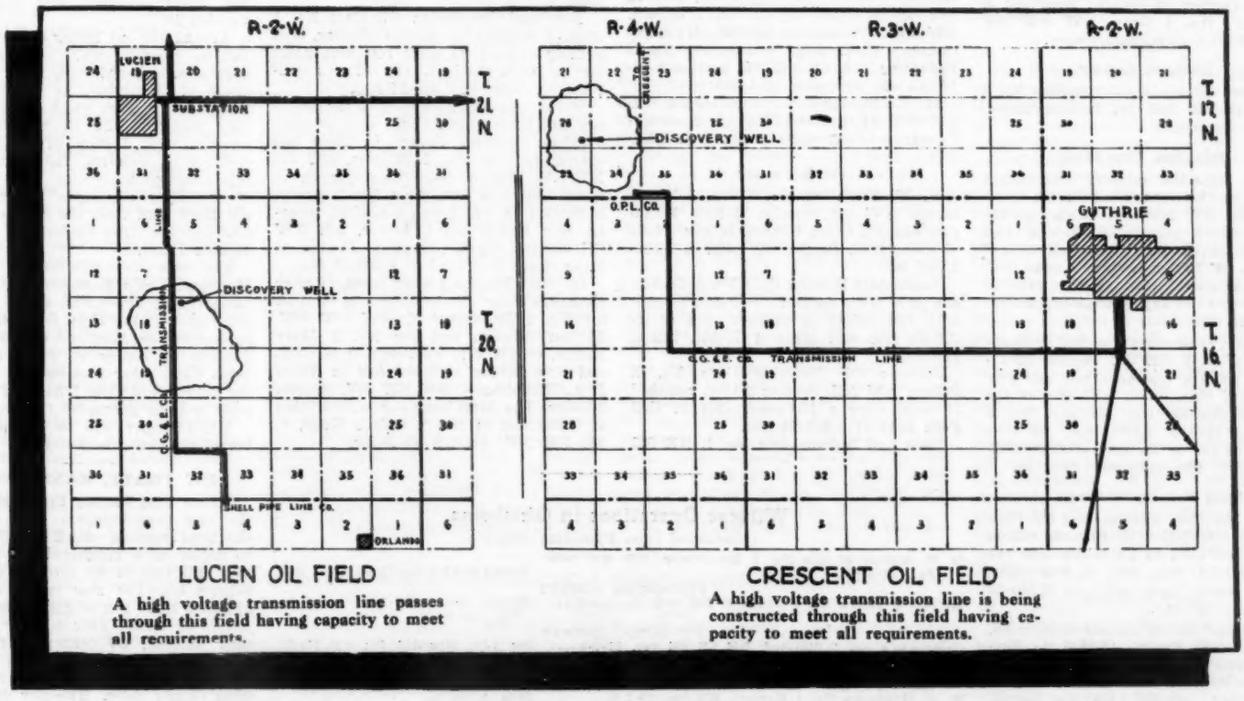

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OKLAHOMA GAS AND ELECTRIC COMPANY

Commercial Department

Oklahoma City, Oklahoma

County E. W. Jones and others' No. 1 Lucas, NW NE NW Section 2-6-4, was acidized with 1,000 gallons, and later swabbed 990 bbls. in 24 hours. Six-inch pipe was set at 4,085 feet and total depth 4,135 feet.

Superior Oil Co.'s No. 1 Hamm was completed. It made 670 bbls. in 24 hours. This is a dolomite producer, 4,171 to 4,218 total depth. It is located in NE cor. Section 5-6-4.

New work in the Greater Seminole area included the following: Atlantic Oil & Producing Co. and others' No. 1 School Land, C NE NE NW Section 36-10-4, Pottawatomie County, a rig; Tillman & Hill's No. 1 Thomas, SW cor. NE Section 11-9-6, Seminole County, cellar dug; Shell Petroleum Corp.'s No. 8 Hopper, SE cor. NE Section 19-9-6, Seminole County, rigging up to drill after having been plugged back; Ligon & Todd and others' No. 1 Kiker, Block 146, Section 30-8-8, Wewoka Field, Seminole County, spudded; Charles Liddell, No. 1 Brandenburg, NW SE SW Section 3-7-4, Pottawatomie County, rig up; Keyokla Petroleum Co.'s No. 1 McGee, SE SW NE Section 4-7-4, cellar and slush pits dug; Sinclair Prairie Oil Co.'s No. 2 Meyers, SE cor. Section 32-7-4, rig; Amerada Petroleum Corp.'s No. 3 Harrison, NE NW SW Section 33-7-4, rigging up rotary; Moebris' No. 1 Sullivan, SE NE NW Section 31-7-5, Pottawatomie County, rigging up rotary; Tilley's No. 3 Walker, NE cor. NW Section 22-7-8, Hughes County, machine in; Amerada Petroleum Corp.'s No. 2 Mitchell, SE NE NE Section 3-6-4, Pottawatomie County, rigging up rotary; Bradfield & Darborne's No. 1 Gray, NW SW SW Section 25-6-4, rigging up rotary.

Pontotoc County

Lake Oil Co. has started drilling No. 3 Barker, C NW NE SE Section 25-5-4, Pontotoc County.

Oklahoma City Field

Frank Russell's mystery well north and east of the capitol building in Oklahoma City, SW NW SE Section 23-12-3w, set 6-inch pipe at 6,550 feet and drilled to 6,700 feet. The well flowed 325 bbls. in 13 hours, 5 per cent mud and fresh water. Gas at the rate of 2,000,000 feet per day (estimated) accompanied the fluid.

Phillips Petroleum Co.'s No. 2 Beaucamp, NW NW SE SE Section 22-11-3w, was given a four-hour test and produced 1,372 bbls. of oil with gas at the rate of 23,000,000 feet per day. No. 3 Beaucamp flowed 1,350 bbls. in four hours, with gas at the rate of 27,000,000 feet per day. The wells were shut in.

Good Results in Osage

Indian Territory Illuminating Oil Co.'s No. 1, C NE NE NW Section 8-25-6, swabbed 106 bbls. in 24 hours, and the hole filled 1,500 bbls. with oil over night. The oil comes from sand at 2,846-63 feet. It may be shot.

Kasiski and others completed their No. 1, SE SW SW Section 15-25-6, in Bartlesville sand at 2,724-57 feet, which was shot with 80 quarts. It made 215 bbls. the first day and 135 bbls. the second, with 15 bbls. of water.

Champlin Refining Co. completed No. 1 NE cor. SE Section 16-24-7. Its initial 24-hour production was 223 bbls., swabbing and flowing. It had been shot in Bartlesville sand at 2,584-2,636 feet.

Lewis Production Co.'s No. 1, NE cor. NW Section 33-24-7, in the Naval Reserve area, flowed 380 bbls. the first day, after a 100-quart shot in Bartlesville sand at 2,580-2,652 feet. The last 26 feet was shot.

Peters Petroleum Corp. and Producers & Refiners Corp.'s No. 4, CSL SE NW NE Section 24-24-7, shot with 30 quarts a shallow sand topped at 690 feet, total depth 7,120 feet, and swabbed 125 bbls. in 24 hours.

Bay Oil Co.'s No. 1, CNL NW NE Section 36-24-7, found Burgess sand at 2,529-55 feet and swabbed 70 bbls. in 24 hours. It will be shot.

Gypsy Oil Co. and Continental Oil Co. treated their No. 1, C SW SW SE Section 12-23-7, with 100 gallons of acid in Siliceous lime at 2,894-2,901 feet. It responded with 600 bbls. in six hours.

New work in Osage County included Lewis Production Co.'s No. 1, SE cor. Section 9-24-7, spudded; Producers & Refiners Corp.'s No. 2, NW SW NW Section 15-24-7, cellar dug; Kasiski & Peters Petroleum Corp.'s No. 2, NE SE NE Section 16-24-7, cellar dug; and a location made for No. 3, SE NE NE, Section 16. Lewis Production Co.'s No. 1, SE NW Section 21-24-7, drilling at 800 feet; Peters Petroleum Corp. and Producers & Refiners Corp.'s No. 1, SE NE NW Section 19-24-8e, location; Mead Oil Co. and others' No. 1-A, SW NW NE Section 24-24-8, location; Murringold and others' No. 2, CEL SW SE NE Section 25-21-8, drilling at 270 feet.

Tulsa and Wagoner Counties

It was an off week in the Tulsa-Wagoner County territory. There was only one completion and it was dry. Johnson Oil Refining Co. has rig up for No. 4 Davis, CNL NE SE Section 19-19-10 Barth, Sand Springs district; Webb and others' No. 2 McIntosh, SE cor. Section 22-18-15, Broken Arrow district, was spudding; S. W. Anthony's No. 6 Muskogee, SE SW NW NE Section 9-16-12, Mounds area, rigged up; same operator's No. 2-A Cowles, C W half SW SE Section 6-16-13, was dry and abandoned at 1,780 feet, with no sands; Knowlton and others were rigged up and shut down on No. 3 Tiger, NE cor. SE Section 24-16-13; Bryan Petroleum Co.'s No. 1 Wilcox, CEL SW NW Section 2-16-14, was rigged up. Dodson and others rigged up on No. 1 Gibson, SW SE NW Section 8-15-18, Muskogee County; H. L. Jolly will deepen No. 2 Spaulding, NE SE SE NE Section 8-15-18, an old well, now at 1,590 feet.

H. C. Detrick's No. 2 McIntosh, SE SW SW SE Section 17-15-18, Muskogee County, was dry and abandoned at 1,360 feet.

Creek County

A. W. Swift abandoned No. 1 Washington, NW cor., Section 13-19-9, Mannford district, Creek County. It was a hole of water from Bartlesville sand at 2,142-2,204 feet.

Commercial Drilling Co.'s No. 5 Tucker, SW NW SW, Section 17-19-9, was shot with 160 quarts in Skinner sand at 2,228-69 feet and made a 75-bbl. initial producer.

Johnson Oil Refining Co.'s No. 2 Prince, NW NE, Section 3-18-8, swabbed 70 bbls. after a 120-quart shot in Red Fork sand at 2,607-34 feet.

Todd and Willoughby's No. 1, NE SE NW, Section 34-18-8, made 40 bbls. initial production after a 140-quart shot in Layton sand at 1,237-74 feet.

New work in the county included National Refining Co.'s No. 11 Futrell, SW NE, Section 1-19-9, rigged up; Wood Oil Co.'s No. 2 Grayson, NW NE NE, Section 3-18-8, rigged up; Samples & Mann's No. 1-A Matey, NW NE SW, Section 14-18-8, spudded; J. E. Crosbie, Inc.'s No. 7 Esco, CNL NW SW, Section 26-18-8, rig on ground; F. O. Akin's No. 2 Tiger, NW cor. SE, Section 34-18-8, rigged up; Doss and others' No. 2 Tiger, SW NW NE, Section 34-18-8, rigged up; Galbreath & Byers' No. 3 Harjo, SW cor. NW, Section 35-18-8, location; Texas Co.'s No. 1 Harry, NW cor. SW, Section 35-18-8, location; Henry and others' No. 1 Taylor, NW cor. SW, Section 2-17-8, machine; E. A. Smith and others' No. 4 Freeman (twin), SE NE SW, Section 14-17-8, location.

Okmulgee County

Pettinger & Wagner's No. 1-B Bell, NW cor. 8-15-12, Okmulgee County, was abandoned at 1,661 feet. The hole filled with water from the Glen sand at 1,606-61 feet.

Payne County

Deep Rock Oil Co.'s No. 2 Harris, SW cor. NE Section 9-18-5, an old well deepened, is a 40-bbl. well in Viola lime at 3,495-3,530 feet.

Northwestern Wildcats

Blauner and others will abandon their wildcat test, No. 1 Maple, NE NW SE, Section 20-27-4, Kay County, at 3,343 feet.

Acre and Tex-O-Kan Oil Co.'s No. 1 Acre, a wildcat in Alfalfa County, was drilling in shale at 6,041 feet with 2,000 feet of oil in the hole. The oil was coming from a pay at 5,910-17 feet.

It was an uneventful week in the southern Oklahoma fields. There were no completions reported. George L. Pace has started to drill No. 2 Bristow, NE SE NE NE, Section 29-2s-7w, a quarter of a mile, more or less, from No. 1 Payne, in Section 28, which was a 120-bbl. pumper. Roy Kyle's No. 1 Lester, NE NW SE, Section 4-2s-8w, Stephens County, is being tested in a sand at 1,438-45 feet.

In the Tatums-Tussey area, Carter County, Carter Oil Co. has made location for No. 1 Bridenthal, C NW SW SW, Section 3-1s-3w, and for No. 1 Mary Riddle, C NW NE SW. Section 4-1s-3w, and was drilling at 1,560 feet in No. 1 J. A. Nicholson, C SW NE SW, Section 3-1s-3w. The same company was drilling at 2,233 feet in No. 1 Gideon Gray, C SE NE NE, Section 10-1s-3w.

Wildcat Operations in Oklahoma

(Continued from Preceding Page)

O. N. Maines et al's No. 1 Scheldberg, NW SW NW Sec. 27-23-6 ..... Wilcox sand 3,114-38 ft; wtr.; S.D.

PITTSBURG COUNTY

Moffett & Hall's No. 1 Jones, C NE NW Sec. 14-8-14 .. Broken sand 3,100-3,200 ft.; fishing for tools.

PONTOTOC COUNTY

Galbreath's No. 1 Stafford, NE SE SE Sec. 31-2-6..... Set 8-in. pipe 465 ft.; S.D. 470 ft.
Gilbert's No. 1 Starritt, NW SE Sec. 28-4-6..... Drlg. 1,315-20 ft; 5,000,000 ft. gas.
Choctaw O. & G. Co.'s No. 1 Thompson, SW NE SW Sec. 1-1-7 ..... U.R. 8-in. csg. 1,600 ft.
W. E. McGraw's No. 1 Mayhus, NE Sec. 19-2-6..... Drlg. 1,180 ft.
McGee et al's No. 1 Newborn, SW NE Sec. 31-5-4..... Rig.
Williams' No. 1 Kroth, NE SE Sec. 33-3-4..... H.F.W. 1,977 ft.
Wirrick's No. 1 fee, SE SW Sec. 29-2-7 ..... Acidized; flowed 550 bbls. in 24 hrs.; S.D. for tankage.
Sledge et al's No. 1 Worley, SW SE SW Sec. 22-3-7w.... Killing gas at 1,174-77 ft.; T.D.

POTTAWATOMIE COUNTY

Atlantic Oil Prod. Co.'s No. 1 School land, C NE NW NW Sec. 3-10-6 ..... Rig.
Payne Drlg. Co.'s No. 1 Lovelace, NW SW NW Sec. 27-6-4 T.D. 3,780 ft.; csg. collapsed.

SEMINOLE COUNTY

Sinclair Prairie's No. 1 Tierney, SE cor. Sec. 3-11-6..... T.D. 4,606 ft.; Wilcox sand 4,592; cored dry sand 4,593-4,606 ft.
Stewart & Egan's No. 1 Sanderson, NE SW Sec. 27-6-5.. Drlg. 3,220 ft.
Filmire's No. 1 Howiegs, SE NE SW Sec. 1-7-7 ..... S.D. for wtr., 820 ft.
Huffman Drlg. Co.'s No. 1 Scott, NW cor. SE ..... Drlg. 390 ft.

WASHITA COUNTY

McWhirter & Bost's No. 1 Hall, SW SE SE Sec. 28-8-19w. Drlg. 180 ft.

Southern Oklahoma

ATOKA COUNTY

J. D. Boukan's No. 1 Howard, NW SW NW Sec. 20-2s-10e. Drlg. 406 ft.
Blake's No. 1 Galbreath, SW NE SE Sec. 5-1-15 ..... Drlg. 248 ft.
Malernee et al's No. 1 Cole, NE NW Sec. 19-2s-14..... Drlg. 638 ft.

JEFFERSON COUNTY

Wakefield's No. 1 Kelly, NW SE Sec. 1-5s-8w..... Drlg. 550 ft.

STEPHENS COUNTY

Doyle Oil Co.'s No. 1 Cunningham, SE NE NW Sec. 4-1-6w ..... S.D. 2,500 ft.

TILLMAN COUNTY

J. H. Everett's No. 1 Crane, SW cor. Sec. 15-3s-14w.... Rig.

MAJOR COUNTY

Paul R. Robb's No. 1 Vittitoe, C NE SE Sec. 11-5-4..... Drlg. 1,950 ft.

Oil Company Executive Honored by the Church

William L. Connelly, chairman of the board of the Sinclair Prairie Oil Co., will be inducted into knighthood in the Order of the Holy Sepulchre at a formal dinner in the Tulsa Club, Tulsa, October 10.

WILLIAM L. CONNELLY

Around the oil leader's shoulders will fall the gleaming white cloak of the crusaders, emblazoned with the red enamel cross of Jerusalem as he becomes a knight in an order which legend and history together link to St. James, the apostle, first Bishop of Jerusalem, to Godfrey of Bouillon, the Crusader who was satisfied to become only "Defender of the Holy Sepulchre" after wresting the Holy land from the Saracen, and to Charlemagne, first emperor of the Holy Roman Empire.

The order is conferred by the Most Reverend Louis Barlassina, D.D., Latin patriarch of Jerusalem, grand master of the Order of the Holy Sepulchre, at the request of the American chapter. Bishop Francis C. Kelley of Tulsa and Oklahoma City, other prelates, lay leaders of the church and close friends of Mr. Connelly will be guests at the dinner.

Mr. Connelly will be the only member of the order in Tulsa.

NEW PRATT, KANSAS, RATES

Mayor Guy Sitton, Pratt, Kans., and the city commissioners have called off the bond election called for October 16 to decide on a municipal gas plant, due to a reduction in the rates by the Public Service Co. The new rates: Minimum, $1; first 2,000 feet of gas, 50 cents; next 8,000, 40 cents; next 40,000, 35 cents; next 350,000, 25 cents; next 600,000, 22½ cents; over 600,000 feet, 20 cents. These rates are about 22 per cent lower than former rates. The city commission accepted the rates and recalled the election and the gas fight is over.

GEORGE BLACKWELL DIES

CHATHAM, Ontario, Oct. 2.—Word has reached Petrolia, Ontario, of the death in Winton, Queensland, Australia, on July 1 of George Blackwell, aged 74. Born in Wales, he came to Petrolia in the early boom days and became prominent as an oil driller. He left Petrolia for Australia 37 years ago with a party of drillers to work on artesian water wells, and in later years was government inspector of wells in the Winton district.

WILLIAM WASSON DIES

William Wasson, 84 years old, oil operator in the Mid-Continent Field since early 1900, died last week at Oklahoma City, Okla. A native of western Pennsylvania, Mr. Wasson gained his early experience in the oil fields of the Keystone State.

Tideland Drilling and Excess Production Under NRA Hold Interest of California Operators

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., Oct. 2.—Litigation to prevent production of oil and gas from beneath state tidelands in the Huntington Beach area, and refusal of several operators to conform with provisions of the oil code, promised to keep things humming during the next several weeks, as both matters command early attention. A list of operators failing to comply with provisions of the NRA code will be forwarded to Secretary Ickes by Umpire Pemberton at an early date. This list will include California operators who have overproduced for the period between September 8 to September 30, inclusive, and should consequently be forwarded to Washington about October 10. It would not be surprising if the regional committee for California endeavored to work out a program mutually acceptable to protesting operators as a last resort before submitting the question to Secretary Ickes for Federal action. California operators who have protested against the enforcement of the code have expressed a desire in most instances to submit their problems to the General Committee for adjudication.

The suit instituted by state officials against the Termo Corp., which has been producing oil and gas from beneath Huntington Beach tidelands, was postponed until October 6 at the preliminary hearing held in Santa Ana September 22. In the meantime, the Standard Oil Co. and Pacific Electric Railway, nominal defendants in the original suit, have joined forces with the state in a concerted attempt to outlaw the whipstocking of wells under and across their respective properties at Huntington Beach. This latest move is looked upon as an effort to prevent the state from negotiating leases with tideland operators.

Crude Oil Production

The appointment of L. P. St. Clair, president of the Union Oil Co. of California, as general chairman of the Sixth Regional Committee, is especially meritorious and guarantees an equitable application of the NRA code in the Pacific Coast territory. Under the new order the Sixth Regional Committee will be in direct charge of the California proration program, replacing the Central Proration Committee effective October 1, 1933. The Regional Committee, which will have the responsibility of allocating California production, is comprised of W. H. Berg, Standard Oil Co., of San Francisco; James Bermingham, The Texas Co.; R. A. Broomfield, Barnsdall Oil Co.; H. P. Grimm, Pacific Western Oil Co.; Oscar Howard, independent operator; W. H. Geis, Italo Petroleum Co.; J. H. Jenkins, Associated Oil Co.; Albert S. Johnston, Dabney-Johnston Oil Co.; William Keck, Superior Oil Co.; Ralph B. Lloyd, The Lloyd Corp.; Fred Owen, Berry Oil Co.; Laurence Kelly, Thomas Kelly & Sons, Inc.; W. C. McDuffie, receiver in equity for Richfield Oil Co.; W. W. Orcutt, Union Oil Co.; J. H. Simcox, Continental Oil Co.; J. U. Stair, Shell Oil Co.; Lawrence Vanderleck, Fullerton Oil Co., and C. P. Watson, Seaboard Oil Co.

Crude oil production in California has been running somewhat below the established quota during the past two weeks due primarily to the fact that major compaies are curtailing in excess of the prescribed allowable and will probably continue to effect this additional restriction for some time to come. Closing the final month of operation under the voluntary oil program in California, production averaged 500,338 bbls. per day during August, representing a curtailment of 51.84 per cent under the state's potential of 1,038,828 bbls. per day according to statistics issued by the oil umpire's office. Excess production averaged 46,596 bbls. per day over the allowable output, most of which, however, was recorded during the early part of the month. Fields in Los Angeles Basin continued the principal offenders as this group produced 54.74 per cent of the state's output for the period, against an allotment of 49.96 per cent of the state total and representing 37.56 per cent of the state's potential. Fields in the San Joaquin Valley were assigned 48.94 per cent of the total potential, were given 37.16 per cent of the allotment and produced 33.44 per cent of the total production during the month of August. Fields in the coastal district were assigned 13.50 per cent of the potential, 12.88 per cent of the allotment and produced 11.82 per cent of the actual output. In the matter of excess production during the month of August, Los Angeles Basin fields overproduced 47,218 bbls., the coastal fields 701 bbls., while San Joaquin Valley fields underproduced 1,323 bbls. per day.

Huntington Beach

The litigation involving operators engaged in Huntington Beach tideland exploitation has created a condition of unrest and uncertainty with the result that a number of operators have suspended drilling operations pending the outcome of a hearing scheduled to be heard in Santa Ana early in October. Companies affected by the state's tideland suit have been advised by counsel to impound all funds received until the suit is finally settled. During the early part of the week the Beloil Corp. completed No. 1 Huntington flowing 728 bbls. of exceptionally clean 24.6 gravity oil per day. This well was bottomed at 4,650 feet and finished with a 4½-inch liner including 690 feet of perforated. F. A. Burkett recompleted No. 1 M. A. B. early in the week and this well was returned to production flowing at the rate of 2,100 bbls. per day, the oil being clean and testing 27.6 degrees A.P.I. Burkett's new well was bottomed at 4,572 feet and is flowing through a three-quarter inch bean under a pressure of 600 pounds on the casing. The Simaroo Oil Co.'s No. 2 Morris, which blew in as a gas well late in August, has been recompleted flowing at the rate of 2,075 bbls. per day following a squeeze job which sealed off the upper 200 feet of perforations. This well came in flowing 25,000,000 feet of natural gas per day and inability to produce the well prompted the company to cement off the upper portion of the perforated pipe in an effort to exclude the production of gas which was undoubtedly coming from the highest point of the formation.

Montebello

With the exception of the Universal Consolidated Oil Co.'s preparations to drill two new wells in the Montebello Field, deep zone exploitation in this field has not yet become a reality. Montebello operators are marking time pending completion of a definite development program involving the recently discovered deep Cruz zone. Operators in this field are at liberty to start driling operations at any time but will not be allowed to produce from the deep Cruz zone until the Regional Committee approves a development program in harmony with the NRA program. Standard Oil Co. is expected to begin making hole in No. 72 Baldwin, a new well in the Montebello Field, within the next few days, but this project is scheduled for completion in the upper zone. The Universal Consolidated cleaned out No. 1 Cruz during the early part of the week and this project is at present flowing 1,450 bbls. per day, although the company will comply with code requirements in the immediate future. This well is still on a production test and is therefore producing within the limits prescribed by the production code.

In the Long Beach Field of Los Angeles Basin, the Dabney-Johnston Oil Corp. completed No. 53 Signal flowing 351 bbls. of relatively clean 27.2 gravity oil per day. This well, a former lower zone producer, was plugged back from 7,430 feet to 5,140 feet and the 6⅝-inch perforated at 5,000-5,100 feet. In the West Coyote Field of Los Angeles Basin, the Standard is installing a gas trap on No. 53 Emery preparatory to putting this well on steady production at 5,725 feet. In the meantime, a new rig is under construction for No. 54 Emery. Plymouth Oil Co., drilling an outpost on the McNally property, has reached a depth of 4,100 feet but is not yet deep enough to pick up the pay. In the Santa Fe Springs Field the General Petroleum has plugged back No. 231 Santa Fe from 4,852 feet to 4,740 feet and will attempt to complete this well in the Meyer zone. There are two other new wells under way in the Santa Fe Springs Field at present, both of which, No 16 Farwell of the Union and No. 28 Slusher of the Shell are recent spuds.

Dominguez

The Republic Petroleum is rigging up rotary equipment in No. 2 Childs in the Dominguez Field of Los Angeles Basin and the company will attempt to develop commercial production in this well, which was abandoned by another operator as not commercially productive. In addition to this work, the Republic Petroleum is erecting rig for No. 5 Childs and will probably start drilling operations within the next 15 days. This company has finished two substantial producers on the Childs lease in the Dominguez Field since acquiring this property late in 1932. The Shell is expected to finish No. 46 Reyes as a commercial producer some time within the next 10 days and this well is expected to be followed into production within a short time by No. 47 Reyes, which is at present rotating ahead slightly below the 4,000-foot level. No. 48 Reyes is being rigged up preparatory to an early spud and rig construction has just been started for No. 49 on the same property. The Union has three wells drilling in the Dominguez Field and is rigging up rotary equipment for two more projects, No. 33 Callender and No. 25 Hellman.

Mountain View

The Mountain View Field of Kern County is still an enigma as far as production is concerned, although something tangible along this line should be evident within the next few weeks. The most disconcerting feature in connection with drilling operations in the Mountain View Field up to the present has been the failure of the Shell to develop commercial production in No. 2 Porter Day, a direct offset to the Hogan Petroleum Co.'s No. 1 Wharton, which is flowing 300 bbls. of exceptionally clean 34.3 gravity oil per day through a sixteen-sixty-fourths inch bean under a pressure of 800 pounds. It hardly seems possible, in view of the exceptional care exercised by the Shell in the drilling of No. 2 Porter Day, that the company could miss completing a satisfactory well. During the early part of the current week the company swabbed No. 2 Porter Day after the well had been finished at 5,838 feet, but it failed to result in a natural flow. The well made several short flows of exceptionally clean 32.4 gravity oil but does not seem to have sufficient kick to result in a natural completion.

The Bankline Oil Co. has been coring

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	Sept. 16		Sept. 9			
Intercoastal-domestic—	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Fuel oil	49,683	7,098	.....	.....	919,302	.....
Diesel and gas oil	.....	.....	.....	.....	1,200,559	534,120
Gasoline	270,132	38,590	548,473	78,353	7,773,538	5,962,160
Kerosene	.....	.....	.....	.....	508,895	154,372
Foreign exports—						
Crude oil	5,082	726	227,473	32,496	5,569,574	6,102,543
Fuel oil	120,456	17,208	84,723	12,103	5,932,453	6,163,258
Diesel and gas oil	83,674	11,953	21,988	3,141	2,391,685	1,795,565
Gasoline	.....	.....	96,139	13,734	4,287,517	6,139,272
Kerosene	.....	.....	89,046	12,721	1,481,313	2,062,149
Naphtha distillates	.....	.....	.....	.....	.....	120,075
Coastwise-domestic—						
Crude oil	32,199	4,600	237,768	33,967	5,442,231	10,439,942
Fuel oil	358,761	51,252	180,654	22,951	7,257,836	8,577,704
Diesel and gas oil	.....	.....	1,484	212	852,716	939,262
Gasoline	110,597	15,800	293,370	41,981	9,153,335	11,139,984
Kerosene	.....	.....	.....	.....	143,597	182,093
Naphtha distillates	.....	.....	.....	.....	27,651	.....

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Intercoastal-domestic—						
Diesel and gas oil	40,225	5,746	79,322	11,332	400,078	403,361
Gasoline	.....	.....	.....	.....	702,977	652,856
Kerosene	.....	.....	.....	.....	482,430	75,760
Lubricants	.....	.....	.....	.....	24,366	23,829
Foreign exports—						
Crude oil	.....	.....	.....	.....	1,320,041	707,651
Fuel oil	.....	.....	154,500	22,071	1,040,549	798,098
Diesel and gas oil	.....	.....	.....	.....	824,450	519,332
Gasoline	77,890	11,127	170,835	24,405	3,163,072	2,671,785
Kerosene	11,425	1,632	166,168	23,738	809,705	757,550
Lubricant	.....	.....	14,942	2,135	96,370	30,094
Coastwise-domestic—						
Fuel oil	64,310	9,187	.....	.....	2,552,822	2,163,459
Diesel and gas oil	.....	.....	.....	.....	179,259	231,433
Gasoline	38,697	5,528	83,149	11,878	2,948,067	2,731,292
Kerosene	4,977	711	.....	.....	90,033	84,546
Lubricants	.....	.....	.....	.....	2,751	.....

some good looking oil sand in No. 1 Symons, located in the extreme southern part of the district, and this well may bear watching as it appears to show exceptional promise. The significance which attaches to the showing logged by this well lies in the fact that it was generally regarded as not being any too favorably located with respect to structure. If this well is ultimately completed as a commercial producer it will extend the productive limits of the field more than a mile southeastward and tend to change preliminary estimates as to the extent and trend of the structure. The Barnsdall Oil Co.'s No. 1 Mott, west of the Hogan Petroleum Co.'s discovery well, is not showing up any too hot, although this well is not yet, out of the running by any means. The Long Beach Petroleum Co. picked up the top of the Kern River series in No. 1 Vedder-Petrol at 4,842 feet and is at present drilling ahead toward the top of the Santa Margarita.

Kettleman Hills

The North Kettleman Oil & Gas Co. has been busily at work during the past week endeavoring to recover the fish which has been retarding progress in No. 1 Lillis-Welsh, its deep test in the Kettleman North Dome Field at 10,944 feet. This outpost, located in the extreme western part of the Kettleman North Dome Field, showed exceptional promise just previous to the development of mechanical trouble a few months ago and the remedial work now under way is consequently being watched with considerable interest. Drilling operations at Kettleman Hills are showing an increasing tendency after a general restriction of work extending over a period of approximately a year. The Kettleman North Dome Association recently spudded in two new wells and is making preparations to start work on two more, No. 36-36-Q in the extreme eastern part of the field and No. 4-20-J in the western part of the field. The Standard is rigging up No. 38-19-J, a new well to be drilled in the Huffman section of the Kettleman North Dome Field, and is making preparations to start work in the near future on No. 8-27-J, No. 58-27-J and No. 45-1-P. Union Oil Co. is making exceptionally fast progress in No. 4 Amerada King, a recent spud in the western part of the field, but it will probably be another 60 days before the bit in this hole makes its last cutting in the Ochsner zone at approximately 8,500 feet. The Kettleman Middle Dome Field, proven up as commercially productive by the Standard Oil Co. a few months ago, comes within the catagory of new fields as this district has less than the prescribed 10 producing wells, which is the accepted difference between a new and an old field. In conformity with this ruling, no further work is expected to be undertaken in the Kettleman Middle Dome Field until a general agreement is reached. The program for this field should be ratified in the near future as operators have just about decided on the amount of work to be undertaken during the next several months.

Lost Hills-Belridge

The Associated Oil Co. has cored 72 feet of what appears to be an exceptionally good looking oil sand in No. 1 Williamson, a deep test which the company is drilling in the Lost Hills Field of Kern County in conjunction with several other operators, and preparations have been made to run a formation tester in order to determine the possible significance of the showings encountered. No. 1 Williamson is down 6,050 feet at present and while several favorable looking showings have been encountered from time to time none have seemed to justify the expectation of resulting in commercial production. In the Southern Belridge Field of Kern County the General Petroleum is still in the brown shale in No. 1 Berry and this project at 8,475 feet does not show any evidence of a change in formation.

Himovitz Oil Co. successfully completed No. 2 in the Mount Poso Field of Kern County during the early part of the week and this new well was brought in doing 588 bbls. of relatively clean 16.2 gravity oil per day from 2,025 feet, the hole having been completed with a 6⅝-inch liner including 41 feet of perforated. Four wells are scheduled to be given production tests in the Mount Poso Field during the next 15 days. Two of these projects, Bern Oil Co.'s No. 2 Glide at 1,782 feet and the Ekoh Oil Co.'s No. 2 Vedder at 1,890 feet, are scheduled to be bailed within the next few days. E. A. Bergere has concluded drilling operations on No. 1 at 1,716 feet and the General Petroleum has just started drilling out the cement in No. 1 Glide, which has been redrilled and deepened to the second Vedder at 1,850 feet. In the Round Mountain Field of Kern County the Golden Bear Oil Co. is completing preparations to put No. 1 Rex on the beam at 1,697 feet following an unavoidable delay of a week or so but the outlook is not any too promising for the development of substantial production, due to the limited amount of formation to be tested.

Union Avenue

With two wildcats under way in the Union Avenue district of Kern County, the potentiality of this area should be determined within the next 90 days as subsurface formations are especially conducive to fast footage. During the early part of the week, the Alta Oil Co. spudded in No. 1 in Section 6-30-28 and a few days ago the Union Oil Co. started work on No. 1 K. C. L. in Section 15-30-28. These two wells are located approximately midway between the Fruitvale and Mountain View Fields of Kern County, although each well is being drilled on a possible individual structure. This segregation is made because it does not appear probable that these two wells could be located on the same structure because the Western Gulf drilled a series of four dusters between the two holes in question. It is therefore logical to assume that these two wells are being drilled on separate structures, although there is very little evidence of a structure as far as surface indications are concerned.

Ohio Oil Co. is expected to begin drilling operations on its deep test in the Buena Vista Lake district of Kern County early in October as rig construction has already got under way. The company has found it necessary to take extraordinary precautions in the construction of the rig foundation due to the possibility of being submerged during the winter months and consequently work has been slowed down somewhat. This test appears to have considerable merit both because of the fact that it is located in a strategic interval and also because geophysical exploration has been of a positive character. Considerable acreage has been leased by various operators east of the Ohio's projected test in Section 31-31-26. The Pyramid Hills Oil Co. is still held up with mechanical trouble in its Devil's Den wildcat as practically no progress was recorded during the current week.

Ventura Avenue

Shell Oil Co. completed No. 76 Taylor, a new well in the Ventura Avenue Field during the early part of the week and this project was brought in flowing 735 bbls. of exceptionally clean 30.9 gravity oil per day from 5,879 feet. Immediately subsequent to the completion of this new well, the Shell spudded in No. 78 Taylor and will probably start drilling operations on No. 79 in the near future. The Associated is rigging up Nos. 22 and 27 on the Ventura Land & Water Co.'s property and both projects are expected to begin making hole within the next 10 days. The General Petroleum, which has been conducting a series of production tests on No. 15-A Barnard, a deep test in the Ventura Avenue Field, will probably be in a position to make another production test early next week. This hole, which was carried down to 9,000 feet, has been successfully plugged back by stages in an effort to eliminate a troublesome water condition.

Standard Oil Co. has shut in No. 1 Chase & Bryce, a recent completion in the Goleta gas field of Kern County at 4,397 feet, and while there is a possibility that the hole may be deepened in search of oil production, this seems rather remote. It is significant to note, however, that the Standard logged several minor showings in the Sespe just previous to completion and also that the gas in this well appears to carry a minute quantity of natural gasoline. The amount of casinghead is of a minor consequence, however, as field reports indicate only a trace. Barnsdall and Rio Grande are reaming No. 8 Doty in the Elwood Field of Santa Barbara County at 3,348 feet preparatory to landing a string of casing at approximately 3,340 feet. Signal Oil & Gas Co. is drilling in the Sespe at 4,400 feet but has not yet encountered the pay in No. 2 on tideland permit No. 98. This well should pick up the oil sand in the immediate future, however, unless the Sespe should be found barren at this point. In the Summerland Field of Santa Barbara County, the Lincoln Drilling Co. is rigging up rotary drilling equipment in No. 3 Williams preparatory to a resumption of drilling at 1,556 feet.

T. W. CREELMAN DIES

CHATHAM, Ontario, Oct. 2.—Thomas Wilson Creelman, accountant in the Imperial Oil, Ltd., office at Sarnia, died recently, age 54 years. Mr. Creelman had been in the Imperial service 32 years, serving at the Regina branch for a short time in 1916, and also at Montreal and Toronto. He was with the International Petroleum Co. in Peru for five years.

FRED KEY HURT

Fred Key, vice president, and Gilbert Moss, chief mechanic, of the Key Boiler Equipment Co. of East St. Louis, Ill., were injured Friday near Rolla, Mo., when their automobile, bearing emergency parts for a Tulsa refinery, was forced off the highway into a ditch.

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well, location—	S.T.R.	Depth	Status:
Palm Ridge Oil Co., No. 1 Palms, Los Angeles Co.	2- 2-15	7,150	suspended
Pacific Gulf, No. 1 Athens, Los Angeles Co.	19- 3-13	6,034	suspended
Pacific Dev. Co., No. 1 Wilmington, Los Angeles Co.	16- 3-13	961	cemented
Wilmington Oil Co., No. 1 Wilmington, Los Angeles Co.	28- 4-13	4,060	sd. sh. drilling
Sunrise Pet. Co., No. 1 Dominguez, Los Angeles Co.	3- 4-13	5,015	reaming
Oakes & Mead, No. 1 Lynewood, Los Angeles Co.	31- 2-12	4,940	redrilling
Colito Oil Co., No. 1 Monterey Park, Los Angeles Co.	25- 1-12	5,319	suspended
Community Oil Co., No. 1 Montebello, Los Angeles Co.	34- 1-11	5,281	suspended
Universal Consd., No. 2 Montebello, Los Angeles Co.	5- 2-11	rig	rigging up
Universal Consd., No. 3 Montebello, Los Angeles Co.	5- 2-11	mtl.	building rig
Nance, M. K., No. 1 Montebello, Los Angeles Co.	6- 2-11	rig	suspended
Signal Pet., No. 1 Puente, Los Angeles Co.	14- 2-10	4,908	plugging back
Guiberson, S. A., Jr., No. 1 Sunset Beach, Los Angeles Co.	16- 5-11	mtl.	building rig
Willetts Pet., No. 1 Saugus, Los Angeles Co.	35- 5-16	2,074	suspended
Alpha Oil Co., No. 1 Calabasas, Los Angeles Co.	22- 1-18	1,371	reaming
Marble, Willard, No. 1 Van Nuys, Los Angeles Co.	6- 2-16	2,760	suspended
Plymouth Oil Co., No. 1 West Coyote, Los Angeles Co.	24- 3-11	4,068	hd. sd. drilling
Vaqueros Major Oil Co., No. 1 Huntington, Orange Co.	tideland	mtl.	building pier
Nuoli Co., No. 1 Newport, Orange Co.	29- 6-10	4,791	sd. sh. drilling
Mineral Exploration, No. 1 Capistrano, Orange Co.	8- 8- 7	4,302	suspended
Saddleback Oil Co., No. 1 El Tora, Orange Co.	3- 6- 7	80	suspended
Placentia Dev. Co., No. 1 Placentia, Orange Co.	31- 3- 9	1,800	sd. sh. drilling
Brown, W. F., No. 1 Atwood, Orange Co.	26- 3- 9	rig	suspended
Rubens, Sy, No. 1 Atwood, Orange Co.	19- 3- 9	mtl.	building rig
Spindle Top Oil Co., No. 1 Salton Sea, Riverside Co.	25- 7-10	3,590	suspended
Great American Pet., No. 1 Chino, San Bernardino Co.	18- 2- 8	2,660	milling
Great American Pet., No. 2 Chino, San Bernardino Co.	18- 2- 8	1,596	sd. sh. drilling
McCarthy, C. F., No. 1 Chino, San Bernardnio Co.	14- 3- 8	803	sd. sh. drilling

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well, location—	S.T.R.	Depth	Status:
Standard Oil Co., No. 1 Goleta, Santa Barbara Co.	20- 4-28	4,397	shut in
Monterey Expl., No. 1 Point Concepcion, Santa Barbara	33- 5-33	3,400	sd. sh. drilling
Lincoln Drlg. Co., No. 3 Summerland, Santa Barbara Co.	21- 4-26	1,556	rigged up
Meganos Oil Co., No. 1 Purisima, Santa Barbara Co.	28- 8-34	2,800	oil sand
Cuyama Oil Co., No. 1 Cuyama, Santa Barbara Co.	12-10-27	3,220	gr. sd. drilling
Woodrow Pet., No. 1 Rincon, Ventura Co.	4- 3-24	7,602	br. sh. drilling
Bardeen Pet., No. 1 Fillmore, Ventura Co.	13- 4-19	3,230	prod. test
Hancock Oil Co., No. 1 Fillmore, Ventura Co.	13- 4-19	2,373	prod. test
Oil Ridge Oil Co., No. 1 Fillmore, Ventura Co.	1- 4-19	....	road
Los Cerritos Pet., No. 1 South Mountain, Ventura Co.	17- 3-20	614	rd. sh. drilling
Kneiper & Atha, No. 1 Bardsdale, Ventura Co.	7- 3-19	722	gr. sd. drilling
Williamson & Donaher, No. 1 Simi, Ventura Co.	36- 3-18	765	sd. sh. drilling
Dabney, H. R., No. 1 Simi, Ventura Co.	22- 2-18	1,000	suspended
C. C. M. O., No. 3-A Miguelito, Ventura Co.	23- 3-24	4,166	suspended
Midlands Pet., No. 1 Ojai, Ventura Co.	9- 5-23	7,841	redrilling
Wilshire Oil Co., No. 1 Sulphur Mountain, Ventura Co.	20- 4-21	2,198	suspended
Kirk, W. A., No. 1 Sulphur Mountain, Ventura Co.	21- 4-21	565	hd. sd. drilling
Mosher, J. W., No. 1 Santa Paula, Ventura Co.	22- 4-21	1,570	br. sh. drilling
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	5,000	suspended
International Oil Developers, No. 1 Conejo, Ventura Co.	33- 2-20	2,810	cleaning out
Hub Pet. Co., No. 1 Gould Hills, Kern Co.	22-29-21	6,840	suspended
Purman, T. H., No. 2 Gould Hills, Kern Co.	27-29-21	335	suspended
Casa Mira Oil Co., No. 1 Belridge, Kern Co.	29-28-20	4,800	gr. sh. drilling
General Pet., No. 1 Belridge, Kern Co.	30-28-21	8,476	br. sh. drilling
Cumberland Oil Co., No. 2 Devils Den, Kern Co.	17-26-18	3,270	suspended
Lincoln Pet., No. 1 Devils Den, Kern Co.	10-25-18	2,172	suspended
Hanna, Tom, No. 1 Devils Den, Kern Co.	25-25-18	3,516	suspended
Pyramid Hills Oil Co., No. 1 Devils Den, Kern Co.	24-25-18	4,140	fish D/P
Fowler, F., No. 1 Blackwell Corner, Kern Co.	15-26-19	3,170	suspended
Associated, No. 1 Lost Hills, Kern Co.	2-26-20	6,070	sd. sh. drilling
Howells Bros., No. 1 Round Mountain, Kern Co.	32-28-29	1,250	hd. sh. drilling
Keno Pet. Co., No. 1 Lerdo, Kern Co.	14-29-27	4,531	suspended
Ohio Oil Co., No. 1 Buena Vista Lake, Kern Co.	31-31-26	mtl.	building rig
Caravel Pet. Co., No. 1 Edison, Kern Co.	19-30-30	1,801	suspended
Union Oil Co., No. 1 Union Avenue, Kern Co.	15-30-28	101	sd. drilling
Alta Oil Co., No. 1 Union Avenue, Kern Co.	6-30-28	429	sd. drilling
Shell Oil Co., No. 2 Mountain View, Kern Co.	29-30-29	5,838	no kick
Hogan Pet. Co., No. 2 Mountain View, Kern Co.	29-30-29	4,843	sd. sh. drilling
Bankline Oil Co., No. 1 Mountain View, Kern Co.	4-31-29	5,950	sd. sh. drilling
Barnsdall Oil Co., No. 1 Mountain View, Kern Co.	31-30-29	5,904	sd. sh. drilling
Long Beach Pet., No. 1 Mountain View, Kern Co.	29-30-29	5,150	sd. sh. drilling
Mohawk Pet., No. 1 Mountain View, Kern Co.	30-30-29	5,958	will abd.
Mohawk Pet., No. 2 Mountain View, Kern Co.	30-30-29	6,650	sd. sh. drilling
Mohawk Pet., No. 3 Mountain View, Kern Co.	30-30-29	2,833	sd. sh. drilling
Comanche Oil Co., No. 1 Comanche, Kern Co.	15-32-29	rig	suspended
Badger Oil Co., No. 1 Wheeler Ridge, Kern Co.	31-11-19	4,483	suspended
Gatton & Luethe, No. 1 Madera, Madera Co.	32-10-17	3,020	cemented
Russ Oil Synd., No. 1 Kingsburg, Fresno Co.	20-12-11	2,709	cleaning out
Bergman, Harry, No. 1 Kingsburg, Fresno Co.	12-12-11	4,159	suspended
Graham & Loftus, No. 1 Raisin City, Fresno Co.	20-15-18	5,906	suspended
Emerich Oil Co., No. 1 Mendota, Fresno Co.	35-13-13	3,320	suspended
Western Gulf, No. 1 S. P., Fresno Co.	3-17-15	5,590	sd. sh. drilling
Schmeizer, R. F., well No. 1, Fresno Co.	36-16-14	mtl.	building rig
Hogan Pet. Co., No. 1 Joaquin Ridge, Fresno Co.	28-20-16	6,605	suspended
Superior Oil Co., No. 1 Jacalitos, Fresno Co.	6-22-16	5,130	sd. sh. drilling
Kent & McDonald, No. 1 Carrizo Plains, San Luis Obispo	3-32-22	3,830	suspended
Paso Robles Oil Co., No. 1 Edna, San Luis Obispo Co.	27-27-11	4,191	suspended
Guess, E. B., No. 1 Corcoran, Kings Co.	7-21-21	6,197	suspended
Brown, A. M., well No. 3, Kings Co.	10-23-19	1,205	suspended
Knudsen & Schmidt, No. 1 Reef Ridge, Kings Co.	36-23-17	6,873	suspended
Dudley Dome Oil Co., well No. 1, Kings Co.	9-23-20	rig	rigging up
Magee & Stone, No. 2 Alpaugh, Kings Co.	33-21-22	3,149	suspended
Cardinal Oil Co., No. 1 Los Banos, Merced Co.	26-10- 9	rig	rigged up
Merced O. & G., No. 1 Chowchilla, Merced Co.	2- 9-16	rig	suspended
Na-Pa Oil Co., No. 1 Griffith, Napa Co.	7- 8- 3	3,750	suspended
Oakdale Oil Co., No. 1 Oakdale, Stanislaus Co.	5- 2-10	4,815	redrilling
Pacific Northern Oil Co., No. 1 Guinda, Yolo Co.	22-12- 3	5,350	gr. sd. drilling
Buttes Oilfields Co., No. 1 Marysville, Sutter Co.	35-16- 1	2,721	gas—shut in
Buttes Oilfields Co., No. 2 Marysville, Sutter Co.	34-16- 1	3,708	sd. sh. drilling
Tehama Pet. Co., well No. 1, Glenn Co.	4-22- 5	4,696	cemented

Ten Completions in Michigan Add 5,000 Bbls.; Operators Are Asking for Larger Allowable

By PAUL A. ELLIOTT
Staff Correspondent, Michigan Fields

MUSKEGON, Mich., Oct. 2.—With Michigan's potential exceeding 60,000 bbls. a day, or more than double the State's allowable under the new oil code, members of the new Michigan oil regulatory board this week adopted several resolutions proposing a new schedule of proration to affect every well in the State with a potential of more than 200 bbls. a day.

Copies of two resolutions, one prescribing a new basis for equitable distribution among 11 recognized pools and the other giving complete rules governing proration of individual wells, accompanied by a memorial to President Roosevelt accepting the State's allowable of 30,000 bbls. a day under protest have been sent to the National Planning and Co-ordinating Committee in Washington.

In the memorial to the President it is proposed that a new allowable be established for Michigan based on the State's actual consumption of petroleum products plus its percentage of the interstate business to be based on Michigan's potential compared with the potential of 18 other oil producing states. It is proposed that government statisticians determine Michigan's consumption and whatever excess would be allowed in production to other states.

New Proration Schedule

Under the proposed new proration schedule the production of about 50 large wells, mostly in the flush Porter Pool in the Mount Pleasant area, probably will be reduced to 35 per cent of their potential in addition to the general exemption of 200 bbls. These 50 larger producers have an aggregate potential of about 50,000 bbls. a day. The other 710 producers in the State, having an aggregate potential of about 12,000 bbls. a day, will be allowed to produce to capacity as they make no more than 200 bbls. a day each.

A new test of potentials was in progress this week to be considered at a meeting of the state board in Mount Pleasant about October 3 for determination of the new proration schedule.

James C. Graves, of Gol-Graves-Mechling Co., contractors and producers, Saginaw, has been named chairman of the new Michigan board approved by Washington authorities. Howard D. Atha, of the Gordon Oil Co., Mount Pleasant, is vice chairman, and E. F. Claggett, of the Pure Oil Co., Saginaw, is secretary. Other members are: G. W. Fink, Mellon & Pollock Oil Co., Pittsburgh and Mount Pleasant; W. A. Hower, field superintendent of the Muskegon Oil Corp., Muskegon, representing western Michigan; Charles L. Maguire, head of the Roosevelt refinery, an independent producer, Mount Pleasant, and George Talbot, independent producer, Saginaw. The board is considering the appointment of O. H. White, former state inspector in Muskegon and Mount Pleasant Fields, and for three years field superintendent for the Dow Chemical Co., Midland, as new state umpire. A. J. Weideman, who two weeks ago was named temporary umpire succeeding Fred Turner, first umpire in the Porter Township Pool, will be continued as statistical engineer and assistant to Umpire White, it was revealed.

An agreement providing for a 60-day shut down of drilling on all except "forced offsets" has been drawn up and will be presented to the operators. If signed by the operators this agreement will result in voluntary suspension of operations on about 24 wells in the Porter area, it is said, bringing considerable relief in the pressing problem of surplus crude production.

The Porter Pool is estimated to have an aggregate potential of more than 45,000 bbls. with this week's new completions adding nearly 5,000 bbls. initial production. The rest of the State including 10 pools has an aggregate potential of about 15,000 bbls. or more. To meet the State's allowable of 30,000 bbls. the Porter Pool must be held to about one-third of its potential, or approximately 35 per cent.

Completions

Ten new completions, seven for oil in four pools and three dry holes, one in each of three areas, comprise this week's record. The seven oil wells added 5,900 bbls. aggregate initial to the State with increases in two Porter Township wells by acid treatment.

Largest of the new completions was Pure Oil Co.'s No. 2 Charles Hill, SE SE NE, Section 18-13n-1w, Porter Township, which came in with an initial daily flow of 2,000 bbls. in the Dundee pay. Two other Porter Township wells made 1,500 and 1,200 bbls. initial, respectively. They were Stoddard and Drake's No. 1 James Emery, NE NE NE, Section 21, and Theodore Oil Co.'s No. 2 J. W. Campbell, NE SW NW, Section 17. The former made 60 bbls. an hour and the latter 55. The fourth new producer in the Porter area is Pure Oil Co.'s No. 2 James W. Peek, NW SW NW, Section 16, a light well which probably will be increased with acid treatment.

Two of last week's completions in Porter Township were increased as follows by treatment: Pure Oil Co.'s No. 1 James W. Peek, S half NW NE NW, Section 16, from 300 to 800 bbls. a day, and Gordon Oil Co. and Edward Stewart's No. 4 J. B. Richmond, NW SE NW, Section 22, from 200 to 550 bbls.

Vernon Township

J. C. Arthur's No. 1 Beatty, SE SE NE, Section 21-16n-4w, Vernon Township, Isabella County, struck oil and gas in the Dundee indicating a commercial producer of unknown initial. Mellon and Pollock Oil Co.'s No. 1 McGuire, C SE SE, Section 36, Vernon, was dry in the Michigan gas series at 1,320 feet.

Greendale Township

Pure Oil Co.'s No. 10 Mullett, SE SW NE, Section 15-14n-2w, Greendale Township, Isabella County, made 20 bbls. initial in the Dundee. Atha Oil Co.'s No. 1 Bond, NE NE SE, Section 20, Greendale Township, was dry in the Dundee at 3,610 feet.

Oceana Field

James Flanagan's No. 3 E. Mitchell, SE SE, Section 36-15n-17w, Hart Township, Oceana County, made 15 bbls. an hour, or about 350 bbls. a day, after treatment in the upper Traverse this week. It is the fifth producer in the western Michigan Field.

Ira Schiefley's No. 1 Van Buskirk, in Section 4, Greenwood Township, Clare County, was dry and abandoned at about

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Lima and Central Ohio Lead in Central West; Several Stark County Wells Nearing Pay

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, Oct. 2.—The bulk of the completions come from the Lima and Central Ohio areas, the busiest field being Wyandot County. In Wood County, Bell & Leapper's test on the George Baker farm, in Section 1, Troy Township, showed light, with an initial of 5 bbls. from the Trenton lime. In Hancock County, S. M. Steen and others' No. 30, on the George Crozier farm, Section 7, Eagle Township, is a 5-bbl. pumper from the same formation. In Seneca County, Tiffin Industrial Gas Co. is drilling on the A. Shumaker farm, Section 5, Hopewell Township.

In Lucas County, Dillon & McFredericks and others abandoned Nos. 1 and 2 on the H. L. and Agnes Galbreath farm, Section 29, Monclova Township. The test started by J. L. Barrett on the T. H. Einsel farm, Section 1, Hopewell Township, Seneca County, has been abandoned.

In Wyandot County, Crane Township, Pitt Oil & Gas Co.'s No. 1 H. E. Myers farm, Section 3, is reported dry. Robert W. Kirk and others' No. 2 on the B. C. Root farm, Section 29, same township, is a light gas well at 1,308-27 feet. E. W. Salliday and others' test on the Charles S. Dix farm, same area, is reported dry. Keiner and others' No. 4 Louis Brandt farm, Section 34, same township, is reported good for 25 bbls. initial at 1,346-67 feet. Toledo Drilling Co.'s No. 4 W. P. Reile farm, Section 13, Salem Township, Wyandot County, is reported a gas well at 1,304 feet. Jones & Coyle are drilling No. 6 on the Margaret Brillhardt farm, Section 28, Crane Township.

In Hardin County, Bert Sheldon's No. 2 on the Ida Wedertz farm, Section 30, Blanchard Township, is a light gas well at 1,336-54 feet. Simms Oil & Gas Co. is drilling on the Douglas Poe farm, Section 4, Roundhead Township. Keiner and others are drilling No. 5 on the Louisa Brandt farm, Section 34, Crane Township, Wyandot County.

CENTRAL OHIO

Fifteen completions were reported from the Central Ohio Field, 10 being gas wells and 5 dry holes, there being no oil producers reported. In Ashland County, Ohio Fuel Gas Co.'s No. 1-5,738, on the Paul Bridenstine farm, Section 14, Jackson Township, was a dry hole in the Clinton lime formation at 2,940-45 feet, which was badly broken. Meltzer and others' No. 7 on the Clark Alber and others' farm, in Lot 34, Mohican Township, same county, is drilling.

In Cuyahoga County, Ohio Fuel Gas Co.'s No. 1-5,744, on the Frank Mussehl farm, Lot 38, Strongville Township, is a gas well at 3,091-99 feet. Same company's No. 1-5,745, on the O. B. Peachy farm, in Tract 3, Olmstead Township, same county, was dry in the Clinton lime at 2,940-45 feet, but badly broken. Obermiller is drilling No. 2 on the J. Merkle farm, Lot 31, same township, below 2,370 feet.

In Lorain County, Wittmer Oil & Gas Co.'s test on the Cleveland Quarries property, Section 19, LaGrange Township, is showing gas at 2,250-56 feet. McMillan and others have a gas showing in No. 1 on the Frank Harrison farm, Lot 6, Carlisle Township, at 800 feet, but drilling deeper. Same parties are spudding No. 4 on the Frank Koverik farm, Lot 95, Easton Township.

In Stark County, East Ohio Gas Co. struck a fairly good gas well in No. 2 on the Leonard Stockert farm, Section 26, Jackson Township, in the Clinton lime at 4,356-85 feet. White and others' No. 1, on the Forest Hill Cemetery property, Section 20, Plain Township, same county, is a fair gas well in the Clinton lime at 4,554-75 feet.

In Muskingum County, Wittmer & Atha's test on the L. W. Thomas farm, Section 10, Washington Township, dry at 4,212 feet. Hopewell Gas & Fuel Co.'s test on the Thomas B. Weaver farm, Section 16, Brush Creek Township, same county, is a gas well at 4,195 feet.

In Guernsey County, C. C. Wharton's No. 4 on the A. Kerr farm, Section 10, Westland Township, showed 12,000 feet of gas, but was abandoned as dry at 1,248 feet.

In Belmont County, A. G. Peters and others' No. 5, on the W. T. Lyne farm, Section 26, is a light gas well in the Berea sand at 1,932-46 feet. Same parties are spudding No. 1 on the Anthony J. Burkhart farm, Section 26, Somerset Township, same county. M. J. Purdy and others have a rig under way, and Robert Lewis is spudding No. 2 on the George Butler farm, in Section 32, same township. M. J. Purdy and others have a rig in for No. 4 on the Rosalie Johnson farm, Section 27, same township. Frank Stranges and others are drilling around 600 feet in No. 1 on the Taggert farm, Union Township, same county. Morhan & Peters are drilling around 1,400 feet on the J. and A. Telckes farm, Section 29, Goshen Township, same county.

In Athens County, Ohio Fuel Gas Co.'s No. 1-5-750, on the Howard Croston farm, Section 17, Berne Township, was dry at 1,117 feet, with a hole full of water. In Lodi Township, same county, same company's No. 1-4,856 on the N. A. Pinkerton farm, in fractional

Section 36, is a light gas well at 1,547 feet.

Stoltz and others have a fishing job at 4,520 feet, in No. 1 on the Lynhurst Addition, Section 17, Plain Township, Stark County. Fulton Oil & Gas Co. is spudding on the Grace B. Steele farm, Section 20, same township. Cunningham Natural Gas Co. is drilling No. 2 on the John Marquardt farm, Section 8, same township, around 4,200 feet, and a rig is in for No. 3 on the same farm.

Stark County

Brendel Producing Co. has a number of wells nearing the pay in Stark County. No. 1 on the V. L. Ney farm, Section 10, Plain Township, is below 4,300 feet; No. 3 on the Lillian Shoemaker farm, Section 5, same township, below 4,100 feet; No. 1 on the Elm Wood Park land, Section 14, near 3,500 feet; No. 1 on the L. and E. Fritz farm, Section 10, below 3,300 feet; No. 1 on the Peter C. Graber farm, Section 12, below 3,200 feet; No. 2 on the J. S. Unger farm, below 2,400 feet; No. 1 on the D. Schlabach farm, Section 25, Lake Township, same county, below 4,400 feet. No. 1 on the Joseph H. McDowell farm, Section 16, Plain Township, is drilling in the sand and will be completed within a short time. In Jackson Township, Stark County, Brendel Co. is drilling around 800 feet in No. 1 on the Cora L. Clay farm, Section 21; No. 2 on the Henry Hutchmacher farm, Section 11, is around 400 feet, and No. 1 on the H. L. Shriver farm, Section 10, is close to 1,000 feet.

Hoover Development Co. is moving a rig on the company's land in Section 8, Plain Township. Harry Hoover is drilling a test on his own land, in Section 21, same township.

East Ohio Gas Co. is drilling No. 1 on the J. E. Wertz farm, Section 31, Green Township, Summitt County, below 3,600 feet.

ILLINOIS

Only one completion was reported from the Illinois Field. Frank Ellison and others' test on the Kizzie Coulter farm, SW Section 25, Robinson Township, Crawford County, which was dry at a total depth of 1,340 feet.

Karns, Kincade and others' No. 1 on the H. C. Apple farm, NE Section 29, Lamotte Township, Crawford County, looks like a water well at 1,120 feet.

John Winbush and others' test on the Winbush farm, Section 8, Iuka Township, Marion County, is idle at 120 feet.

Alspaugh, Mason and Ashby's test on the Martha E. Files farm, Section 22, Old Ripley Township, Bond County, is reported idle at 624 feet.

INDIANA-KENTUCKY

No completions were reported from the Indiana or Kentucky fields.

Michigan Fields

(Continued from Preceding Page)

4,000 feet. It is the second test drilled by the Schiefley interests in an attempt to locate commercial oil production in Clare County.

Muskegon Oil Corp reached the red rock indicator in its No. 1 N. Lieffers, SW NE SW, Section 22-9n-14w, Ravenna Township, Muskegon County, but may drill to the upper Traverse. Depth of the red rock was not announced.

Permits

Eleven new permits were issued this week by the state conservation department. They include six on Porter and one in Lee Township, Midland County, two in Hart Township, Oceana County, and two in West Branch Township, Ogemaw County.

The six permits in Porter Township are as follows: Gordon Oil Co.'s No. 4 Walter J. Deibel, SW SE NW, Section 18-13n-1w, and five for Pure Oil Co. including No. 2-A Iva Bond, NW NW NE, Section 18, No. 5 Charles Hill, NW SW NE, Section 18, No. 2 W. W. Hoyt, NW SE SE, Section 17 No. 1 W. Neitzke, SE NE SE, Section 21, and No. 1 F. E. Rosa, NW SW NW, Section 21.

The others include: L. G. Thompson's No. 1 James Oliver, NE SE NE, Section 18-14n-1w, Lee Township; H. C. Nelson's No. 1 Anna Copenhaven, SE NE, Section 36-15n-17w, and same operator's No. 2 A. Doolittle, NE NE SE, Section 36-15n-17w, both in Hart Township, Oceana County; A. R. Nelson, trustee's No. 1 Victor Nelson, NE NE SE, Section 22-22n-2e, West Branch Township, Ogemaw County, and Alvin Weber, trustee's No. 2 Stella Wilcox, NW NE NE, Section 34, also West Branch Township of Ogemaw.

Three rigs are being moved to other locations in Ogemaw County where a new play is anticipated during coming weeks as the result of the success of Alvin Weber's No. 1 Wilcox, completed in July with an initial flow of 150 bbls. at 1,725 feet in upper Traverse.

C. A. Perry's No. 1 Wobig heirs, Section 6, Mills Township, is scheduled to spud in soon. George Elliott's No. 1 Mier in Section 22, West Branch Township, also was scheduled to start this week, while W. J. Sovereign will start operations on his No. 1 Griffin, Section 29, West Branch Township, next week.

Increased interest in Michigan oil fields was indicated at the September sale of leases on state lands with 11 bidders purchasing oil and gas rights on 2,854 acres at $1,802. The sale resulted in the largest number of leases going to independent operators on state owned lands in Midland, Ogemaw and Mecosta Counties.

Two More Good Wells in W. Virginia Pool; One 750 Barrels and Second 650 Barrels

By STAFF CORRESPONDENT

PITTSBURGH, Pa., Oct. 2.—Two late completions in Lost Run Pool, Clay district, Ritchie County, West Virginia, prove that new pool the most productive of recent years. On Purshers Creek, the Richards Farm Oil Co. completed a second test on the Corlie Ball farm in the Injun sand and as soon as the sand was tapped the well began its flow. It made about 40 bbls. an hour, and at present is producing about 750 bbls. a day. It is about 100 feet northwest of Boehm and Strickler's No. 3.

On the waters of Lost Run of this pool, Boehm and Strickler Oil Co. completed No. 4 on the Boehm and Strickler lease in the Injun sand and it is producing about 650 bbls. a day. It is about 600 feet southeast of Boehm asd Strickler's No. 2. No. 2 on this farm is at present producing about 200 bbls. a day, and No. 3 about 240 bbls. a day. No. 2 is being swabbed in preparation for a shot. None of the flowing wells has been shot.

The crude in this pool is regular Eureka Pennsylvania Grade oil. The performance of the wells drilled in this Injun sand streak since its discovery last February has been most impressive as all have had a heavy head for a long period. Except for a sharply defined western boundary, the limits are undetermined, especially north asd south.

The following activity is noted in this pool: Richardson and others have rigged up on the Ruth Andrews farm. Richards Farm Oil Co. is rigged up for No. 4 on the Frank R. Ball farm, and is drilling No. 3 which will soon be due in the sand. The same company has two tests drilling on the Michael Moran farm. Lucas and Mahaney are down 1,300 feet in a second test on the Catherine Ball farm. Elder and Louder have made a location for No. 3 on the S. E. Satterfield farm on Purshers Creek and about 250 feet southeast of the Smith and Hendershot test on the C. H. Frederick farm. No. 2 on the Satterfield is making about 150 bbls. a day, and the test on the Frederick is good for about 400 bbls. F. R. Roberts and others are preparing to drill on the Sada McGinnis farm on Purshers Run about 1,000 feet northwest of the Frederick test. A test on the McGinnis farm will complete over a mile of Injun sand wells, all in a direct line.

Future Allowable

In an announcement South Penn Oil Co. stated to all producers with whom it has contracts for all oil as run and connected to the lines of the South West Penna Pipe Lines in Southwest Pennsylvania, the Eureka Pipe Line Co. in West Virginia, and the Buckeye Pipe Line Co. in Southeast Ohio that it was willing to purchase that production during October and succeeding months provided it does not exceed 125 per cent of the November, 1931, deliveries.

The notice further stated that this allowable would continue indefinitely unless the Planning and Co-ordinating Committee at Washington might require a curtailment.

This notice is opportune at the present time for it permits producers, who have been withholding reconditioning of their wells fearing curtailment, to prepare to restore their former production totals. It also is a stimulus to additional drilling to replace declining wells. None of the districts of the lower eastern fields has yet been able to reach the 125 per cent figure during the month, and from present totals will hardly reach the 100 per cent base of November, 1931.

Completions totaled eight in the eastern fields during the week and in addition there were four dry holes. Four of the wells were gassers and four were producers with an initial production of 1,430 bbls. Southeast Ohio had but two completions as likewise had Southwest Pennsylvania.

WEST VIRGINIA

In addition to the two heavy producers in West Virginia, another well was completed. On Bull Fork of Tanner Creek in DeKalb district, Gilmer County, A. E. Ellis and others completed a second test on the Ware and Webster lease. It was drilled in the Maxon sand and is showing for about 25 bbls. a day.

In Curtis district, Roane County, Reedy Oil & Gas Co. drilled its No. 4 on the L. M. Riddle farm deeper from the top of the Salt sand to the lower pay. It is now showing for about 15 bbls. a day and formerly was a gas well.

In DeKalb district, Gilmer County, C. B. Lewis and others cleaned out and shot No. 1 on the Saphrona Amos farm and increased production from 1 to 7 bbls. a day.

Gas Wells

In Boone County Pure Oil Co. completed No. 61 on the Federal Coal Co. tract in Sherman district in the Berea sand and has a gas well of over 200,000 feet a day. In Calhoun County, C. B. Lewis and others completed a second test on the W. T. Kelley farm in Sherman district in the Injun sand at 2,207 feet and it is a gas well gauging at about 425,000 feet a day.

In Lincoln County, Pridemore and Adkins completed a test on the Henry Chandler heirs farm in Jefferson district. It is a gas well from both the Big Lime and Berea sands. The Big Lime showed for about 33,000 feet a day, and the Berea about 148,000 feet a day. The total depth was 2,212 feet.

In Pleasants County, Wheeling Oil Co. drilled a test on the T. C. Hammett farm in Grant district through the Salt sand and found it dry. In Wirt County, on Big Island Creek in Clay district, C. S. Benedict and others drilled No. 5 on the James T. Adams farm through the Mitchell sand it was also a dry hole.

Drilling in West Virginia

In Boone County several new wells are starting. In Washington district, Cambridge Gas Co. is rigging up for No. 6 on the C. C. Lewis heirs farm. In this district, Pond Creek Oil & Gas Co. is drilling No. 15 on the Cole and Crane lease and has reached 1,145 feet. In Scott district, Cambridge Gas Co. is rigging up for No. 7 on the Roman Pickens lease. In this district, Southeastern Gas Co. has abandoned locations on the C. A. Craft farm, and the Sallie E. Price farm. In Sherman district, Pure Oil Co.'s test on the A. M. Prichard farm is down 2,761 feet, and its No. 62 on the Federal Coal Co. tract has reached 2,323 feet.

In Cabell County there is one new test. Swanson and Martin have started drilling on the Humphrey farm in Guyandotte district. In this district, J. W. Ramsey and Son are down 1,650 feet on the W. E. Duncan farm, and Guyan Valley Gas Co. has reached 1,500 feet on the Big Four Realty Co. lot.

In Clay district, Davenport and Davis has reached 2,840 feet on the M. S. Price and Holt heirs lease in Henry district. In Jefferson district, Nichols County, Godfrey L. Cabot is drilling at 575 feet on the W. E. Smith farm.

In Calhoun County, on Mushroom Run of West Fork in Lee district, F. F. McIntosh has started drilling No. 6 on the S. A. Hays farm. Lowther and Shuman are down 2,141 feet on the Mace farm. In this district Litt Oil & Gas Co. is building a rig on the J. S. Wade farm. In Sherman district, F. F. McIntosh has reached 1,685 feet on the O. S. Bennett farm. Creed Barker and others are down 900 feet on the M. C. Haught farm. L. P. Bickel has started drilling his No. 12 on the Martha Stump heirs farm and is down 400 feet. Lyle S. Ayers has reached 2,090 feet on the Kate Garritson farm. Poling and Mollahan is drilling at 1,920 feet on the Almetta Wilson farm. C. A. Jarvis and others are down 1,035 feet on the Ida M. Whipkey farm; No. 2 McCall and others are down at 2,050 feet on the White Hall farm and cementing. In Center district, there is a new test. M. V. Burt and others have made a location on the Beeman Wright farm. W. A. Bickerstaff is down 1,775 feet in a second test on the Edward Gainer farm. In Sheridan district, L. B. Carroll is drilling No. 13 on his own property, and Chemical Oil Co. is down 1,775 feet in a second test on the Margaret J. Webb farm.

In Gilmer County, on the waters of Trace Fork in DeKalb district, Charlie F. Despard has completed a rig on the Clyde Amos farm.

In Ritchie County, Anderson and Smith are starting a new test in Grant district. They have a rig ready on the Thomas Maloney farm. J. Swingle and others are down 1,300 feet in a second test on the George Morris farm. In Murphy district, Southern Oil Co. has fished the packer and started drilling deeper its No. 4 on the Alvin Wince farm. The depth is now 1,785 feet. The Lewis & Little Gas Co. is down 930 feet on the Conley heirs farm. W. H. Bickel is down 890 feet on the Jennings Fox farm.

In Monongalia County, Chartiers Oil Co. is drilling at 2,675 feet on the Thomas Williams heirs farm in Clay district. In Battelle district, Manufacturers

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Ten New Locations in Cut Bank, Montana, Area; Small Producer in the State of Washington

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., Oct. 2.—Cranfill & Reynolds' No. 4 State, in the Lea Pool, southeastern New Mexico, was completed for 500 bbls. per day, more than double quantity shown before treating with acid. The Carter and Continental test in the Eunice area probably will be abandoned. Van P. Welch's No. 1 State, 1½ miles from the nearest producer, in the Artesia district, has 600 feet of oil in the hole.

Ramsey Petroleum Corp.'s No. 1 St. Anthony, in northeastern Colorado, completed several months ago as a gas well, gives indications of turning to oil.

In Wyoming, Mountain Fuel Supply Co.'s No. 3 Poston, was completed in the South Baxter Basin Field for 8,300,000 feet of gas per day, and Mutual Oil Syndicate's No. 5, at Button Creek, in Carbon County, is a small gasser. One new location was reported in Carbon County and another in Weston County. Other locations include one in the old Greybull Field and another at Elk Basin.

Ten new locations in the Cut Bank Field in Montana were released. One Cut Bank completion is estimated good for 200 bbls. and another flowed 45 bbls. over night. The East Shelby district in Toole County is to have a deep test.

Washington appears to have a small producer on the Hoh River structure near the discovery well which showed for 20 bbls. a day two years ago.

Two wells are active in Oregon.

NEW MEXICO

Lea County

Cranfill & Reynolds' No. 4 State, C Lot 10, Section 2-21-33, Lea Pool, a west offset to its No. 3 State, has been completed and is making 500 bbls. per day following a treatment with acid. It was drilled to 3,763 feet, total depth. The pay was at 3,758-63 feet. The oil rose 600 feet in the hole in three hours and 900 feet in six hours. It increased to 1,200 feet and it made 204 bbls. in 24 hours on a swabbing test. It was then treated with 600 gallons of acid and responded with an increase to 500 bbls.

Carter Oil Co. and Continental Oil Co.'s No. 1 State, C NE NE Section 28-22-35, south of the Empire Pool and west of the South Eunice Pool and 5 miles west of Continental Oil Co.'s No. 1 William Meyers, is a disappointment at a total depth of 4,474 feet and probably will be abandoned. It had no important shows.

In the Jal area, Western-Anton's No. 1 Conditt, C SW SW Section 12-25-36, is drilling out plug after cementing 8¼-inch at 2,763 feet with 200 sacks. Continental Oil Co.'s No. 2 McCallister 24-A, NW NE NE Section 24-26-36, is waiting on cement after cementing 10-inch at 1,316 feet. Total depth is 1,525 feet, in salt.

Eddy County

Van P. Welch and others' No. 1 State, NW NE SE Section 22-17-28, Artesia area, is showing for a producer. Total depth is 1,948 feet in sand. Oil began showing at 1,935 feet and rose 300 feet in five hours and 600 feet in 12 hours. It probably will be deepened. It is 1½ miles from the nearest producer. Flynn, Welch & Yates' No. 66 State, NW SE SE Section 30-18-28, was deepened from 1,939 feet, where it showed for a 2-bbl. well, to 1,970 feet, in lime, and is testing.

Harry Leonard and Barnsdall Oil Corp.'s No. 9 State, SE cor. NW Section 28-17-29, Jackson area, is drilling at 130 feet with 100 feet of fresh water in the hole. Western Drilling Co.'s No. 2-A Green, C SW NE Section 29-17-29, has resumed drilling and is making hole at 2,337 feet. It showed for 101,000 feet of gas per day at 2,227-63 feet. R. D. Compton Oil Co.'s No. 6 State, SW NE SW Section 15-16-23, upper Cottonwood district, is drilling at 366 feet. Grayburg Oil Co.'s No. 4 Burch, C SE NW Section 19-17-30, Maljamar area, is drilling at 2,835 feet in lime. It had a show of oil at 2,820-25 feet. The 6⅝-inch is at 2,808 feet. C. H. Lockhart and others' No. 2 Root, C SW SW Section 7-17-30, is waiting after cementing 6⅝-inch on bottom at 2,840 feet with 20 sacks.

Ralph Spearow and others' No. 1 McClellan, SW NW NE Section 22-22-23, Indian Creek, is shut down at 3,811 feet in white lime with 3,000 feet of water in the hole. Just before shutting down to repair boilers it had a show of oil at 3,811 feet. Pecos Valley Drilling Co.'s No. 1 McIntyre, NW NW Section 27-23-25, Dark Canon, is bottomed at 650 feet in lime and straightening hole at 600 feet.

Chaves County

George Etz and others' No. 1 Duke, C NE SE Section 14-8s-26, Railroad Mountain district, 24 miles northeast of Roswell, is moving in equipment.

COLORADO

Weld County

Ramsey Petroleum Corp.'s No. 1 Scriven, C NW Section 22-7n-59, Buckingham district, was drilling September 26 at 5,921 feet. The Hygiene sand was not cored in this test, but from the returns it is estimated the well is running around 40 feet higher on that horizon than the same company's gas well, No. 1 St. Anthony, three-fourths of a mile northeast. The elevation of No. 1 Scriven is 5,025 feet (cor.). The Timpas, which will be cored, is expected at around 6,300 feet. It is probable the Muddy horizon will be drilled into with rotary bit and results in that sand will determine whether standard tools will be used to test the Dakota. Considerable pressure is being brought to bear on the Ramsey company to make the test from the top of the Muddy with cable tools.

No. 1 St. Anthony, completed for 6,000,000 feet of gas per day in the Muddy, is supplying fuel for the new test. At first the gas yielded 2 gallons of gasoline per 1,000 feet. Not only is the quantity of gas reported increasing, but it is much wetter. The well is allowed to blow twice a day to clean the gas for fuel purposes. The gasoline is reported to have become light amber in color and is now too heavy to be used for motor fuel as it comes from the separator.

Moffat County

Mountain Fuel Supply Co.'s No. 2 Florence Wilson, C NE NE Section 22-12-100, Hiawatha Dome, is coring and drilling at 6,926 feet and the cores continue to show some oil and gas saturation, but not enough to stop for a test. The contract with the Rocky Mountain Drilling Co. was for a 7,000-foot hole, but it is probable when that depth is reached drilling will continue indefinitely. Same company's No. 1 Wheeler, SE NW NW Section 30-12-100, is drilling at 1,500 feet, and Texas Co.'s No. 1 Van Schaick, SW cor. Section 19-12-100, is standing cemented at 118 feet.

Texas Co.'s No. 1 Iles Investment, SE NW Section 23-4n-92, Iles Dome, is drilling at 2,492 feet. Mountain Fuel Supply Co.'s No. 1 Hatch, SE NW NW Section 9-11-101, Sugarloaf district, is shut down for heavier equipment at 3,519 feet.

Rocky Mountain Gas Co.'s No. 1 Eberle, SE SW SE Section 9-6n-91, Craig Dome, is changing over to cable tools at 3,560 feet, which showed a little gas in the top of the Morapas sand. It will be drilled deeper into the sand. If this well is not commercial, another test will be drilled at another location. It is only 1,500 feet west of a big gasser and the logs of the two wells have not correlated very well.

Park County

South Park Oil Co.'s No. 1 Milligan, NE cor. SE Section 13-8s-76, Jefferson district, is shut down at 3,061 feet.

Adams County

Hills Dome Lease' No. 1 Hills, SE cor. Section 27-3s-64, Watkins district, which has been getting ready to resume, found a good show of oil with some gas in the bottom of the hole at 4,190 feet.

WYOMING

Sweetwater County

Mountain Fuel Supply Co.'s No. 3 Poston, C NW NW Section 22-16-104, South Baxter Basin, was completed as a gasser in the Frontier at a total depth of 2,670 feet and gauged 8,300,000 feet initial.

Carbon County

Mutual Oil Syndicate's No. 5 Dutton Creek Oil & Gas, NE NW SE Section 12-18-78, Dutton Creek, gauged 330,000 feet of gas per day with a rock pressure of 450 pounds at a total depth of 2,128 feet. It is producing from the Shannon horizon, topped at 1,675 feet. Same company's No. 9 Dutton Creek, NW NE Section 12-18-78, which is headed for the Dakota, is fishing for drill pipe at 4,658 feet.

Ohio Oil Co.'s No. 2 Hazlett, NE NE Section 34-23-79, Allen Lake, is drilling at 1,600 feet. Earl W. Reeder, Inc.'s No. 1 Union Pacific, C SW SW Section 19-20-83, Overland Dome, is redrilling at a total depth of 2,750 feet after cementing off cave at 2,600 feet.

A new location is Blakeman & Gillespie's No. 1 Government, NE NE Section 32-21-76, West Rock Creek district, 18 miles northwest of Rock River.

Producers & Refiners Corp.'s No. 4 Wertz, SW cor. SE Section 7-26-89, Wertz Dome, is resuming at 3,541 feet. It was held up at that depth by a fishing job for some time and then shut down until this week.

Natrona County

Triangle Oil Co.'s No. 3 Ames, SW NE SE Section 29-36-85, North Boone Dome, is drilling at 600 feet, with the objective Shannon sand expected at 800 feet. Midway Oil Corp.'s No. 1 Boyer, SW NE NE Section 23-35-79, Midway Dome, is drilling at 3,000 feet.

Converse County

Continental Oil Co.'s No. 30 Converse Sheep, SW SE SE Section 4-33-76, Big Muddy, is drilling in new hole at 4,170 feet after plugging back from 4,767 feet and setting whipstock to drill into and test the Lakota at 4,312 feet.

Niobrara County

J. M. Huber Corp.'s No. 1 Joss, NE NW NE Section 6-35-65, Lance Creek, an old well drilling deeper from 3,200 feet, has rig completed. Ed Shogren and others' No. 1 Olinger, Section 1-36-63, Old Woman's Creek, is moving in materials for a test to the Dakota at 900 to 1,000 feet.

Weston County

An operation in the Osage Field not heretofore reported is Chadron-Osage Oil Co.'s No. 21, SW cor. Section 14-46-64, which cemented the 8¼-inch and shut down. Same company's No. 23, NW NE SW Section 14-46-64, found the sand at 1,880-91 feet. It was unusually hard and was shot with 35 quarts. It is estimated good for 50 bbls. on the pump. Federal Oil Co.'s No. 5, SE cor. Section 15-46-64, is preparing to run pipe on top of the sand. Riggs Oil Co.'s No. 3, SE NE Section 16-46-64, cemented the 8¼-inch at around 2,350 feet and shut down. Hugh Updike & Sons' No. 1, NE cor. Section 22-46-64, is drilling out plug after cementing the 8¼-inch. Western States Oil Co.'s No. 9 Bock, SE NW Section 14-46-64, is drilling at 1,500 feet.

The Osage Field, with the completion of Chadron-Osage Oil Co.'s No. 23 last week, jumped production up to 1,500 bbls. per day, or double the allowable of 750 bbls. under the code. A shutdown of drilling in the field is expected unless the allowable is increased and the operators express opinion this will defeat the primary purpose of the NRA regarding stripper wells.

LeFaivre Oil Syndicate's No. 1 Martin, NW SE Section 29-45-68, Buck Creek, is shut down for 10-inch at 2,099 feet.

Sheridan County

Houghton & Mumper's No. 1 Allison, SW SE Section 15-55-85, Beaver Creek, is rigged and ready to spud after skidding rig. Old hole was lost at 250 feet.

Park County

Henderson Producing Co. has applied for a permit to drill its No. 5-H-11, NE NE Section 31-58-99, Elk Basin Field. It is near a 10,000,000-foot gasser the company completed a few months ago. Resolute Oil Co.'s No. 1 State, C NW SW Section 16-57-101, Badger Basin, is drilling at 2,450 feet. V. M. Kirk's No. 1 Government, SW cor. Section 24-58-98, Frannie Dome, began spudding September 23.

Big Horn County

Torchlight Oil Corp.'s No. 1, SW cor. SE Section 19-51-92, Torchlight Field, a deep test, is drilling at 4,100 feet 100 feet in the Madison lime. It is showing considerable water and some oil. The location is down structure and the oil showing is considered favorable for production on top of the dome.

A new operation in the old Greybull Field is Keystone Oil Co.'s No. 2 Jones, Lot 61, NE Section 20-52-93, drilling at 220 feet.

MONTANA

Glacier County

Ten new locations were released this week in the Cut Bank area. Three by the Texas Co. are as follows: No. 1 W. J. Haggerty, SE cor. Section 9-34-6w; No. 1

B. J. Hinkle, NW cor. NE Section 2-34-6w; and No. 1 Ray Purdy, SE cor. SW Section 35-35-6w. Three by R. C. Tarrant are as follows: No. 1 V. F. Winkler, C SW SW Section 23-35-6w; No. 2 Miller, C SW NE Section 24-34-6w; and No. 4 Haglund, Jr., C SE SE Section 13-34-6w.

One new operation by Montana Power Gas Co. is its No. 1 M. Teterud, 790 feet east of west quarter corner, Section 2-35-5w, spudding. Montana Headlight Oil Co. made a location for its No. 2 Williams, SW cor. NE Section 11-34-6w. W. M. Fulton and others have cellar completed for their No. 2 Haggerty, C NW NW Section 15-34-6w.

Another location, a wildcat, is L. R. Hannah and others' No. 1 Freida Peterson, SW NW NW Section 29-32-4w, southeast of the oil and gas development in the South Cut Bank area. It is building rig. Imperial Natural Gas Co. has a one-fourth interest in the well and surrounding acreage. The block comprises 5,000 acres.

Montana Headlight Oil Co.'s No. 1 Britton, NW SW NE Section 14-34-6w, is estimated good for 200 bbls. initial on the swab at a total depth of 2,890 feet. It is testing. The top of the Darling was at 2,865 feet and the top of the Ellis at 2,885 feet.

R. C. Tarrant's No. 3 Haglund, Jr., C SE NE Section 13-34-6w, flowed 45 bbls. over night from a total depth of 2,761 feet after running 1-inch tubing. It had 1,500,000 feet of gas at 2,718-20 feet and at 2,761 feet had 400 feet of oil in the hole.

The Alberta-Pacific Consolidated Oil Co.'s No. 2 Kiesel, SE cor. NW Section 11-34-6w, is running tubing at a total depth of 2,870 feet. It topped the Darling at 2,841 feet and the Ellis at 2,865 feet. The Dakota-Montana Oil Co.'s No. 2 Haglund, Sr., NE NE Section 14-34-6w, is drilling at 2,770 feet, and the Montana Power Gas Co.'s No. 1 Miller, SW NE NE Section 4-35-5w, is drilling at 1,135 feet. Nyhagen-Bell's No. 1 Anderson, SE NE SW Section 26-35-6w, topped the Colorado at 465 feet, cemented the 10¾-inch at 530 feet and is drilling at 923 feet. Par Oil Co.'s No. 2 Haines, SE cor. SW Section 2-34-6w, is rigging up. Santa Rita Oil & Gas Co.'s No. 1 Cardwell, C NE SE Section 15-35-6w, is drilling at 2,550 feet.

R. C. Tarrant's No. 2 Britton, SW NW SE Section 14-34-6w, is spudding at 225 feet, and his No. 1 Carman, C NW NW Section 19-34-5w, is spudding at 220 feet with 150 feet of water in the hole. His No. 1 Larson, C SW NE Section 12-34-6w, is shut down at 1,885 feet for engine repairs. The Texas Co.'s No. 1 Fisk, C NW NE Section 14-35-6w, plugged back to 2,950 feet and is preparing to test.

Santa Rita Oil & Gas Co.'s pipe line from the Cut Bank Field to the loading racks has been placed in operation. The pipe line rate is 12½ cents per barrel.

Toole County

C. Leonard Smith and others' No. 1, SW SE Section 7-33-2e, East Shelby district, is spudding in for a deep test to the first break in the Madison lime. Contract went to Henry Van der Pas. The location is 12 miles north and 15 miles east of Shelby. Two gas wells are producing from a stray sand in the Colorado shale at around 800 feet.

WASHINGTON

Hoh River Oil Co.'s No. 2 Gilkey, Section 12-26-14w, Hoh River district, Jefferson County, cored sand topped at 768 feet and was found to consist of a series of saturated shale and thin sands 26 feet thick. It pumped 25 bbls. of 39 gravity oil first 24 hours. It was then deepened to the top of the Jefferson sand at 865 feet and liner run to test and is cleaning out. This well was drilled a few feet from No. 1 Sims which two years ago showed for 20 bbls. at this horizon, but was unable to recover the oil after drilling deeper. Wenatchee Valley Oil & Gas Co.'s No. 1 Watkling, Section 14-23-19, Monitor district, Chelan County, is drilling at 1,100 feet. Another test in this district spudded September 17 in the Northwest Oil Research Corp.'s No. 1-A Norco, SW SW Section 26-22-20. Jannsen Drilling Co. has the contract. The structure has about 700 feet of closure for 4,000 acres. It was geologized by C. T. Lupton, of Denver.

Northwestern Natural Gas Corp.'s No. 6 Walla Walla, C NE NE Section 29-11-26, a rotary test to the lower formations in the Rattlesnake Hills gas district, is cleaning out 20 feet off bottom at a total depth of 1,274 feet. Mutual Exploration Co.'s No. 1 Lacey, Section 11-26-13, Hoh River district, Jefferson County, is preparing to test a show of gas at 650-750 feet. It is believed to be enough to fire a boiler. Curtis Natural Gas Co.'s No. 2 Ives, Section 21-40-4, Nooksack district, Whatcom County, is drilling at 1,100 feet.

C. S. Shippey and others' No. 3 Lang, Section 28-39-2, Ferndale district, Whatcom County, is rigging up to drill a shallow test for gas. The Bellingham Chamber of Commerce raised $2,500 for the test to be matched by a similar amount. It is near No. 2 Lang, which was estimated at 500,000 feet at 500 to 750 feet in shale. Miocene Petroleum Co.'s No. 1, NE NW Section 17-12-19, Union Gap district, Yakima County, is drilling at 3,100 feet.

OREGON

Steiwer Dome Development Co.'s No. 1, SW NW Section 14-9s-3w, 11 miles south of Salem, Marion County, set the 10-inch with packer at 700 feet for a water shutoff and is drilling at 900 feet. Clarno Basin Oil & Gas Co.'s No. 1 Antelope, south of Dalles, Wheeler County, is drilling at 3,030 feet.

Light Crude Production From the Lime Found in Well in the South Turner Valley Field

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, Oct. 2.—In the Mercury tract, South Turner Valley,

Miracle Oils' No. 2, LSD 16, Section 5-19-2w5, has encountered a large wet gas flow in the lower lime at 6,800 feet. It entered the Madison at 5,940 feet. The wet gas flow is estimated between 8,000,000 and 10,000,000 feet a day, and the recovery is not crude naphtha, but a light crude oil. Production has been unofficially estimated at 100 bbls. a day. Miracle's No. 2 started drilling several years ago a little east of Hylo Oils' No. 1 and Mercury Oils' No. 1, both of which proved large producers from the lime. Mercury Oils, Ltd., last June undertook completion of the well from 5,581 feet. Mercury owns a half interest.

Light crude production from the lime has been encountered in only two other wells in the Turner Valley Field, Miracle Oils' No. 3, not far from the present producer, and Model Oils' No. 1 in North Turner Valley.

South of the new producer, Associated Royalties' No. 1 Spray, LSD 9, Section 5-19-2w5, is planning to carry a large hole to the lime from 3,350 feet where it has been held up by a difficult fishing and casing job. New 1⅛-inch drilling lines, the largest in the field, and new sand lines are being installed. Still farther south Doralta Royalties' No. 1, LSD 16, Section 32-18-2w5, will spud in within a few weeks.

North Turner Valley

In the North Turner Valley Field, Model Oils' No. 2 Anaconda, LSD 16, Section 22-20-3w5, has run tubing and is testing production. It was drilled to 6,539 feet, after getting the lime around 5,524 feet. The lower lime failed to show increased production so the hole was plugged back to a wet gas show in the upper lime, given a heavy shot, and treated with acid. The treatment is reported to have materially increased the wet gas flow, building up 1,500 pounds pressure in 72 hours, but no estimate of potential crude naphtha recovery has been made.

Central Turner Valley

In the Central Turner Valley, New McDougall-Segur Oil Co.'s No. 6, LSD 11, Section 12-20-3w5, is reported making a steady production of better than 30 bbls. a day of light crude from the McDougall-Segur sand at 3,190 feet. McDougall-Segur Exploration Co. is preparing for its No. 1 test of this horizon in another part of the same section. Widney Petroleums' No. 1, same section, which some time ago was plugged back to the light crude production after deepening to the lime, is reported maintaining a steady production around 30 bbls. a day from this horizon.

Okalta Oils' No. 4, LSD 8, Section 1-20-3w5, is reported drilling below 1,800 feet, carrying casing behind tools, on a test of the light crude horizon.

South Turner Valley

In South Turner Valley, Sterling Royalties' No. 1, LSD 1, Section 33-18-2w5, rotary test, is drilling below 3,800 feet, with the Home sand looked for at 4,200 feet.

Livingston Syndicate's No. 1, LSD 5, Section 34-18-2w5, is drilling below 2,865 feet.

Mar-Jon Section

In Section 28-18-2w5, Becker Syndicate's No. 2 Anaconda, LSD 15, is in a sharp sand below 4,500 feet, after getting the Home sand at 4,385 feet. This test is expected to be the next completion. Mar-Jon Oil Co.'s No. 2 Kindersley, LSD 10, is in the Blairmore formation below 2,855 feet. Pacalta Oils' No. 1, LSD 7, is in the Benton formation below 2,500 feet. Publix Oil & Gas Co.'s No. 1, LSD 8, is reported standing cemented at 1,600 feet. Sunburst-Mid Royal's No. 1, LSD 14, is reported drilling below 1,135 feet. Spooner Oils' No. 5 Anaconda, LSD 1, is ready to spud.

Harry G. Morris and Stewart Goodfellow of Vancouver, British Columbia, have arranged for a test by the Becker Syndicate on acreage leased in LSD 3, Section 28-18-2w5. Location is west of Spooner's No. 5 Anaconda and south of the British Dominion lease.

Far South Tests

In the far south end, Union Drilling Co.'s No. 1, LSD 8, Section 21-18-2w5, ise reported making new hole. This is the farthest south test on the Turner Valley structure, and approximately a mile south of the nearest producer, Mar-Jon Freehold's No. 1.

Hoffar-Lundy Syndicate's No. 1, LSD 13, Section 22-18-2w5, is reported drilling below 3,422 feet. Highwood-Sarcee Oils' No. 1, NE Section 21-18-2w5, which spudded recently, is reported shut down.

Shareholders of Home Oil Co. held their annual meeting at Vancouver, British Columbia, on September 22, when the directors were re-elected, with Col. Nelson Spencer as president.

Tests in the Foothills

In the forest reserve area west of Olds, Hunter Valley Oil Co.'s No. 1 McLaren, Township 31-10w5, has recovered lost bit and is reported making new hole from 2,250 feet.

On the Moose Mountain structure, Graystone Consolidated's No. 2 Signal Hill, LSD 9, Section 34-23-5w5, is reported redrilling below 1,475 feet.

Gas on Watson Structure

On the Watson structure, in the southern Alberta foothills, Drumheller Syndicate's No. 1, Section 20-9-2w5, encountered an unexpected show of shallow gas at 70 feet. The gas caused a caving which necessitated setting the 20-inch casing at 80 feet, shutting off both gas and surface water. Drilling has resumed. This test was located some years ago by Raven Oils, Ltd., and was recently taken over by F. E. Sandercock and associates of Calgary, who organized the Drumheller Syndicate. The flow appears to have been wet gas, though the degree of saturation has not been determined.

Border Fields

On the Alberta end of the international Reserve Dome structure, Rialto Oils' No. 1, LSD 4, Section 15-1-9w4, is reported drilling below 600 feet.

On the Twin River structure south of Lethbridge, Nordon Corp.-C. A. Roney's No. 2 Twin River, LSD 11, Section 2-2-20w4, is cleaning out cavings and fishing for lost bailer. As soon as this is finished the porous sand in the top of the Madison will be given acid treatment and a test made.

Red Coulee Field

In the Alberta end of the international Red Coulee Field, Skov Oil Co.'s No. 1 Kotop, LSD 2, Section 2-1-17w4, is reported drilling out cement after cementing at 2,521 feet to overcome caving in a fine red shale. A fairly heavy gas flow was struck at 1,700 feet and oil is looked for around 2,635 feet. Test was originally started by Ko-Top Oils, Ltd., of Calgary and ultimately taken over by A. Skov of High River who organized the present company.

On the Montana side, Monalta Oil Co.'s No. 4 Buckley, SW Section 1-37n-4w, is reported drilling in Colorado shale below 1,625 feet with change of formation looked for around 2,000 feet. Askalta Oils' No. 8, S half N half Section 22-37-4w, is reported spudding.

Saskatchewan Gas Test

In southern Saskatchewan, Highwood-Sarcee Oils' No. 2, LSD 8, Section 23-12-24w2, is repairing derrick, recently flattened by a storm for the second time since the test started. Casing was cemented at 1,625 feet on top of what appeared to be a gas sand. Location is on the Dirt Hills structure 40 miles southwest of Regina.

British Columbia Drilling

In the Sage Creek district, southeastern British Columbia, Columbia Oils' No. 1 is reported resuming with 12-inch cable tools after cementing 12½-inch casing at 972 feet. While waiting for cement to set an 8-inch shallow hole was started 75 feet from the main well, to tap an oil sand encountered in No. 1 at 100 feet and which is expected to yield sufficient crude to supply No. 1 with drilling fuel.

The logs show that No. 1 penetrated

78 feet of overburden liberally scattered with boulders and glacial drift before reaching the rock. Below this point the formations were shale, hard shell, lime shale, gray and dark gray lime. Some of the rock was very hard but other sections provided good drilling, as much as 54 feet a day being made with cable tools under favorable rock conditions.

Ontario Gassers

In the Dawn Field, Lambton County, Ontario, Union Gas Co.'s No. 67, Lot 24, Concession 9, Dawn Township, is reported drilling below 1,620 feet after encountering 546,000 feet of gas a day, in the Salina formation.

In the old Tilbury Field, Kent County, Salina Oil & Gas Co.'s No. 4 Gifford farm, was drilled to 1,360 feet, and plugged back to 1,350 feet where a shot developed 200,000 feet a day, which settled to 150,000 feet. Location has been made for Salina's No. 5 on the Roy N. Seal farm, northwest part of Lot 9, Concession 13, Tilbury East, 1,005 feet east and a little north of No. 4.

Harry Smith's test in Lot 3, Concession 15, Tilbury East, is standing after plugging back from 1,315 feet to a gas sand with about 20,000 feet a day.

In the Olga Field, Olga Oil & Gas Co.'s No. 7, Earl Flook farm, Lot 19, Concession 8, Raleigh Township, is below 1,500 feet, with production expected below 1,620 feet. The company is delivering gas to the Southern Ontario Gas Co. The Olga company has completed a deal for 10,000 acres of potential oil lands in Mexico, adjacent to the producing areas.

In Dover Township, Kent County, Raleigh Development Syndicate's No. 1, Stephens farm, Lot 2, front concession, is shut in, after a fishing job in the Trenton limestone. The well has a fair production of both oil and gas from the Trenton.

Eastern Fields

(Continued from Page 52)

Light & Heat Co. is down 3,346 feet in drilling deeper its No. 1 on the Henry Yost farm. In Wetzel County, this company has reached 2,840 feet in drilling deeper its No. 3,300 on the W. P. Hubbard farm, Church district.

SOUTHEAST OHIO

There was very little work done in Southeast Ohio during the week. Only one producer was completed and no gas wells. In Knox County the Ohio Fuel Gas Co. completed a test on the Amber Biggs farm, NE Section 4, Union Township. It was drilled in the Clinton sand at a depth of 2,860 feet and is showing for about a 5-bbl. pumper after shot.

In Washington County, NE Section 46, Salem Township, Bay and Weppler drilled No. 7 on the Christopher Lauer farm through the Buell Run sand to a depth of 285 feet. It was a dry hole.

In Ashland County, C. H. Meltzer and others have started drilling their No. 7 on the Aber and Alexander farm, NW Section 34, Mohican Township. It is about 300 feet east of No. 1 on this farm.

In Licking County, Whitehill Oil Co. has made a location for No. 7 on the J. C. Burkholder farm, Section 3, Perry Township. Wehrle Co. is drilling a second test on the O. E. Kreager farm, Section 10, Franklin Township. In Section 14, Fallsbury Township, Upham Gas Co. is nearing the sand on the V. L. Smith farm.

SOUTHWEST PENNSYLVANIA

In Southwest Pennsylvania, there was one fair gas well completed. In West Bethlehem Township, Washington County, George Gray drilled a test on the Harvey Long farm through the Salt sand and has a gas well gauging at 480,000 feet a day. The farm is north of Odell. The Pittsburgh Coal was placed at 387 feet. The top of the Salt sand was at 1,321 feet. Gas was found at 1,328 to 1,341 feet. The depth of the hole was 1,343½ feet.

In Somerset Township, Washington County, Naomi Oil & Gas Co. has reached 2,300 feet on the E. E. Daniels farm. The Gantz and Gas sands were at 2,277 feet and there was about 213,000 feet a day in this formation. The well is still drilling. In the same township, southeast of Amity near Ellsworth, Ecwood Oil & Gas Co. has spudded in and started drilling on the Lee Mansfield farm.

In Amwell Township, Washington County, Carnegie Natural Gas Co. has made a location on the Fred Baumberger farm. It is about 3,000 feet northeast of its test on the C. L. Morton farm and in direct line of production on that formation. The oil producing sand is the Fifth sand, and gas is expected in the 30-foot sand. In this township, Manufacturers Light & Heat Co. is down 1,400 feet on the Maggie I. Craft farm. Wise Oil & Gas Co. has completed its rig on the E. E. Roach farm.

In East Findley Township, Washington County, the test of Hallam and Lewis and others on the H. D. Ely farm is down 2,000 feet. The top of the Big Injun sand was at 1,938 feet and at 1,998 feet the hole filled up with water.

In Beaver County, James Gailey and others drilled a test on the O. Larson farm in Potter Township. It reached the 100-foot sand and there was very little gas found.

In Greene County, Convex Glass Co. has reached 2,507 feet on the Samuel Morse farm in Dunkard Township. It will probably be drilled to the Speechley sand. J. B. Orndoff has completed his rig on the H. B. Scott farm.

In Fayette County, Carnegie Natural Gas Co. is hauling in the materials to start its test on the C. B. Wilkey farm in Jefferson Township.

Louisiana-Arkansas Fields

(Continued from Page 43)

south of Lisbon, on which he has derrick up. John Wadkins began drilling No. 1 Rosser in Section 7-5n-2w, Woodruff County, in northeastern Arkansas, September 2, cemented 40 feet of 10-inch for surface string and was drilling at 1,300 feet. Hensley and Tanner's No. 1 Hudson, SW SE Section 11-5-1e, Hinds County, side of the Jackson, Miss., gas field, began drilling September 20, set 735 feet of 10-inch to cut off artesian water and was drilling at 1,400 feet. Meredith Trading Co.'s No. 1 Nelson and others' is a derrick in SW SE Section 24-6-1e, Hinds County. Love & Lancaster's No. 2 Elton Plantation, NE Section 9-4-1e, Hinds County is a derrick. Cleve Love and others' No. 1 Thomas is a derrick in SW Section 10-4-1e, Rankin County. Hill Brothers and Cleve Love's No. 1 Lancaster is a rank wildcat in SW NW Section 27-5-5e, Rankin County. C. R. Obermeyer and others' No. 1 T. J. Wooten in the P. Martin Survey of Panola County, Texas, began drilling September 10, has surface casing set and is making hole.

NORTH LOUISIANA

Reports reaching Shreveport during the week were to the effect that Johnson-Burnham interests are arranging to go back on No. 1 Long-Bell, NW NW Section 34-2-8, Beauregard Parish, 5 miles west of DeRidder and in the Conroe-Jackson trend play, and deepen it to 5,000 feet or more. It was abandoned some time ago as a dry hole at 3,000 feet. Meantime major interests who built extensive blocks in that part of the country a year or so ago are renewing their leases and in some cases adding to what they already had. B. A. Sherrell and others' No. 1 fee, NW NW Section 18-19-11, Bossier Parish, 3 miles west of old Bellevue shallow production, tested salt water with about 5,000,000 feet of

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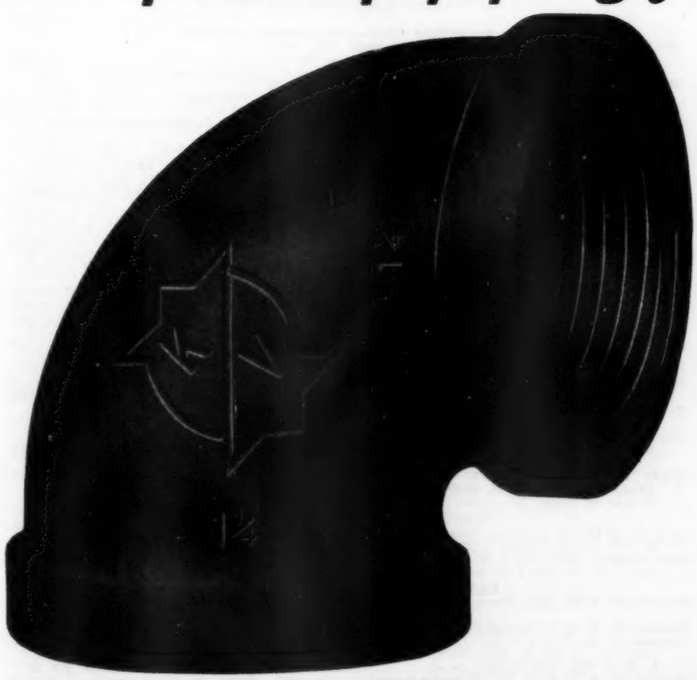

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KENNEDY

VALVES-PIPE FITTINGS-FIRE HYDRANTS

gas at 2,207 feet but probably will go much deeper. It is on the west flank of Bellevue Dome where production was obtained at around 400 feet.

In the Rodessa deep gas district of Caddo Parish, Arkansas-Louisiana Pipe Line Co.'s No. 1 Williams & Windham, NE NW Section 4-22-16, was shut down in lime at 6,509 feet, the deepest hole in Caddo to date. United Gas Public Service Co.'s No. 1 Festervan, Section 33-23-16, same district, was coring lime and shale at 5,710 feet, somewhat deeper than production is usually found in that area so far as footage goes. C. G. Gibbons' No. 1 Burglass, NE NE Section 15-21-16 Lewis district of the old Caddo Field was dry at 1,909 feet had a show of gas at 1,919 and is going deeper. J. B. Hutchinson is arranging to deepen No. 1 Story & Phillips, SW NE Section 28-16-13, a wildcat in the southeast corner of Caddo after a salt water test at 1,046 feet, and J. F. Kerper's No. 1 Barron, NE SE Section 27-16-14 Caddo, is shut down at 3,162 feet. George Greer and others' No. 3 Louisiana Central Lumber Co., NE NE Section 2-9-6 Catahoula Parish, after cementing back from 1,105 feet to 900 feet and setting 6-inch, ran tubing and was swabbing to test without any show of the gas it originally blew out with having developed so far.

N. B. Porter's No. 1 J. W. Porter estate, SE SE Section 23-12-13, a few miles south of Mansfield, DeSoto Parish, was shut down after a dry test at 1,204 feet. Guy Cox and others' No. 1 Lewis, NW NE Section 8-6-1e, Grant Parish, was drilling in the Jackson formation at 840 feet; rather high. H. G. Samson, after abandoning No. 1 Barnes & Sullivan, a wildcat deep test in Section 12-21-7, Morehouse Parish, as a salt water hole at 2,853 feet is rigging up to go still deeper on this rather deep test for Morehouse angle of the Monroe gas field.

In Converse territory of Sabine Parish, DeGeneres, McConnell and others were drilling plug from 8½-inch cemented at 1,836 feet on No. 2 Cranford, NW SE Section 20-9-13, in the center of proven ground. Helena Oil & Gas Co.'s No. 1 Chambliss, formerly reported as No. 1 Graham, SW NE Section 20-9-13, hit a fresh water flow at 200 feet and will case it off. Evans Brothers' No. 2 Cranford, SW SE Section 20-9-13, was dry after a show of oil at 1,500 feet. Windsor Oil Co.'s No. 1 Barr, more or less of a mystery well in SE NW Section 15-9-13, was arranging to use acid after testing dry at 1,950 feet, reported depth. In Zwolle territory of Sabine Parish Investors Production Co. was rigging up to cut casing on No. 1 S. J. Williams, NW NW Section 24-7-11, at around 2,300 feet, total depth 2,800 feet. Some time ago it was treated with acid and never bailed and the acid ate out the casing, according to reports reaching Shreveport. Roy Raines and others' wildcat in the SW SE Section 8-8-10, Sabine Parish, No. 1 Beard, was coring marl at 2,340 feet and shut down at 2,343 feet waiting for a string of casing to be set at that depth. Location is in the extreme northeast corner of Sabine Parish. In Vernon Parish, in the Conroe-Jackson trend play, Vernon Oil & Gas Co. pulled liner set at 2,703 feet for a test on No. 1 Delta Land & Timber Co., Section 2-1n-11, which was dry, and is going deeper.

ARKANSAS

In Arkansas there was even less doing than there was in Louisiana. Black Diamond Oil Co.'s No. 1 Miller Land & Timber Co., Section 29-18-27, Miller County, was shut down at 1,600 feet and Duluth-Arkansas Oil Co.'s No. 2 Beck, SE SW Section 35-15-26, was coring in the red beds at 2,796 feet.

DR. C. B. FORWARD DIES

URBANA, Ohio, Oct. 2.—Dr. Chauncey B. Forward, 72, well-known authority on the refining of crude oil, died at his home here of a heart attack. A native of Pennsylvania, Doctor Forward had spent 35 years perfecting experiments on refining and held numerous patents.

And Does He Look Proud

E. L. Decker, of the Martin-Decker Corp., displaying his first buck, bagged recently in San Luis Obispo County, California. On the right is Harvey Martin, pilot of the Martin-Decker plane.

Tulsa Made Seismograph Used by Byrd Expedition

When the two ships carrying Admiral Byrd's second expedition to the South Pole unload at "Little America," some Tulsa equipment will come out of the ship's hold to take its place among the scientific apparatus used in studying the polar phenomena.

The Seismograph Service Corp. of Tulsa has designed, built and shipped to the expedition a complete recording seismograph unit, similar to that used in the work of this company through the oil fields.

A number of unusual problems of design and construction were met in perfecting the equipment for this polar work. The whole apparatus had to be very compact and light in weight and so arranged that the operators wearing heavy arctic clothing and fur mittens would not be handicapped in their work. Metal used for the sensitive timing device must not vary in specification under the extremely low temperatures. These problems were worked out and developed into a finished product in six weeks' time in the company laboratory in Tulsa, and shipment made on September 18 to the expedition at Boston, Mass.

The complete apparatus was taken to the field by the Seismograph Service Corp. before shipment and tested beside the usual oil field type seismograph, obtaining identical, and in some cases better results. As a result of this new development for arctic use, a real contribution to oil field seismology has been made in the form of a highly portable set of instruments for use in places inaccessible by motor vehicle. Weighing only 300 pounds, made up of three major units, the equipment can be carried by hand, on pack horses or loaded into an ordinary passenger automobile.

The Byrd expedition plans to resume its scientific research in Antarctica begun by the former expedition. Among other things, they will study thickness of the polar ice cap, depth of the water beneath, velocities of sound vibrations in ice formations, with the reflection method of seismograph.

A short wave radio station will be built and operated by Seismograph Service Corp. to keep in touch with the Byrd expedition after they begin operations in Little America. The Tulsa laboratory technician of this company is a government licensed radio operator and will be in charge of the installation and operation of the station. The company maintains such a station now, for receiving only, in order to calibrate its timing devices with time signals sent out hourly from the Arlington observatory.

DR. ERIC STARKE DIES

LOS ANGELES, Calif., Oct. 2.—Dr. Eric A. Starke, one of the leading petroleum geologists of California, died at his home here after a brief illness. He was 68 years of age. Doctor Starke was born in Germany, but came to this country when 3 years of age and spent practically his entire life in California. He became known in the California oil industry in 1890 and eight years later developed a new process for treating kerosene. Later he was credited with discoveries in geology which resulted in bringing in the larger part of the Midway Field, the Buena Vista Hills, Lost Hills, Kern River Front and several other southern California fields.

Doctor Starke was chief chemist for the Pacific Coast Oil Co. and later for the Standard Oil Co. Following his geological work he became chief geologist and director of exploration for the Standard Oil Co., holding this position for 23 years. For the past 15 years he had been independently engaged as a petroleum engineer.

ASK FEDERAL AID FOR OIL LINE

CASPER, Wyo., Oct. 2.—Wyoming oil men have written to U. S. Senator John B. Kendrick and Governor Leslie A. Miller urging Federal aid for an oil pipe line from northern Wyoming to Glenrock via Casper. Such a line would tie into the Stanolind Crude Oil Purchasing Co.'s line at the Glenrock tank farm. It would probably consist of 12-inch pipe, be about 200 miles long and cost in the neighborhood of $3,000,000. It would afford an additional outlet of from 30,000 to 40,000 bbls. of black oil daily.

Electric Power Available in Crescent and Lucien

With the construction of a high voltage transmission line through the newly opened Crescent Field, Oklahoma Gas & Electric Co. is continuing its policy of pioneering the use of electric power in the oil fields of this State. Another recent development of this company was the completion of a high line through the Lucien Field, southwest of Perry.

These new lines will provide oil operators in these fields with electric power to take care of the present and future needs for pipe line stations, water stations, gas lifting stations, drilling operations and refineries.

Having unlimited electric power available in flush or new fields makes it possible for operating oil companies to make instant decisions and immediate installations of prime mover equipment for all classes of mechanical equipment applications they desire. Although it has required large investments, Oklahoma Gas & Electric Co. has always shown its eagerness to be of assistance to oil-producing companies, pipe line companies, and refining companies by supplying dependable power for all types of mechanical applications. It has consistently aided in the development of newly opened fields.

The power rate schedules in the Crescent and Lucien Fields are the standard schedules offered for all fields throughout the State.

CHARLES A. IRICK DIES

Charles A. Irick, 55, superintendent of production in Kansas for the Texas Co., died in a Wichita hospital on September 26, of encephalitis.

JAMES McLEAN DIES

CHATHAM, Ontario, Oct. 2.—James McLean, a retired driller, of Petrolia, Ontario, died at Sarnia General Hospital on September 26, age 73.

Gulf Coast Fields and Wildcats

(Continued from Page 42)

BARBERS HILL—CHAMBERS COUNTY

Mills Bennett Prod. Co.'s No. 2-B Gulf fee, Wm. Bloodgood Sur., 1,240 ft. N along N line, 300 ft. E at right angles to W line ..... Cmtd. csg. 832 ft.
Mills Bennett Prod. Co.'s No. 3-E Gulf fee, 442 ft. W along S line, 710 ft. N at right angles to S line.... Derrick.
Mills Bennett Prod. Co.'s No. 3 J. B. Means, 300 ft. W of No. 2 in center of strip (W.O.) ..... Drlg. sticky shale 5,447 ft.
Gulf Prod. Co.'s No. 1-D Barber, 78 ft. S, 65 ft. W of NE cor. ..... Derrick.
Humble O. & R. Co.'s No. 3-C Kirby ..... Drlg. shale 1,024 ft.
Sinclair Prairie Oil Co.'s No. 8 Wilburn (W.O.), Henry Griffith League ..... Comp. 500 bbls.; ½-in. choke; T. D.5,443 ft.
Sinclair Prairie Oil Co.'s No. 15 Wilburn, Henry Griffith League, 150 ft. W of No. 14 ..... Derrick.
Sinclair Prairie Oil Co.'s No. 16 Wilburn, 50 ft. N and 50 ft. W of No. 12 ..... Derrick.
Sun Oil Co.'s No. 11 J. Wilburn (W.O.), Wm. Hodges Sur. ..... Drlg. shale 5,351 ft.
Sun Oil Co.'s No. 14 J. Wilburn, Henry Hodges Sur. (W.O.) ..... Drlg. lime rock 4,614 ft.
Sun Oil Co.'s No. 16 J. Wilburn, Henry Griffith Sur. (W.O.) ..... C.O. at 3,760 ft.
Sun Oil Co.'s No. 17 Wilburn, Henry Griffith League, 150 ft. W of No. 6 and 50 ft. S of N line ..... Derrick.
Texas Co.'s No. 7 Wilburn (W.O.), Henry Griffith League Fishing drill pipe 5,174 ft.
Texas Gulf Prod. Co.'s No. 3 C. Kirby (W.O.) ..... T.D. 5,229 ft.; sidetracked and drlg. new hole in sand 5,134 ft.
Texas Gulf Prod. Co.'s No. 2 Fitzgerald, Henry Griffith League, 300 ft. W line, 80 ft. S line ..... Drlg. cap rock 968 ft.
Yount Lee Oil Co.'s No. 21 Chambers County (W.O.), Wm. Bloodgood Sur. ..... Drlg. hard sand and shale 3,751 ft.
Yount Lee Oil Co.'s No. 22 Chambers County, Wm. Bloodgood Sur., 200 ft. from W line, 262½ ft. from N line of lease ..... Drlg. sand and shale 4,379 ft.

BIG CREEK—PORT BEND COUNTY

C. & C. Drlg. Co.'s No. 1 Wheat, M. Young Sur., 265 ft. NE of Gulf's No. 3 Wheat ..... Drlg. shale 3,776 ft.
Gulf Stream, Inc.'s No. 1 A. H. Theis, 236 ft. E of old No. 4 A. H. Theis in line, Mitchell Young Sur. .... Derrick.

RABBS RIDGE—FORT BEND COUNTY

Humble O. & R. Co.'s No. 8-A A. P. George ..... Comp. 50 bbls. per hr.; ⅝-in. choke; T.D. 5,333 ft.
Humble O. & R. Co.'s No. 11-A Lockwood & Sharp .... Drlg. shale 4,850 ft.
Humble O. & R. Co.'s No. 17-B Lockwood & Sharp, 2,872 ft. N of E line, 1,129 ft. N of S line of L. & S. No. 1-A tract ..... Drlg. shale 2,127 ft.
Humble O. & R. Co.'s No. 24-A Lockwood & Sharp .... Drlg. shale 4,521 ft.
Humble and Gulf's No. 10 Meyers, J. Rabb Sur., 987 ft. E of No. 8 ..... Drlg. shale 4,241 ft.
Texas Co.'s No. 5 Waters, 300 ft. S, 300 ft. W from NE cor. of lease ..... Rigging.
West-Len Oil Co.'s No. 1 Mulahill, 300 ft. N of S line, 200 ft. W of E line ..... Drlg. gumbo 946 ft.

SUGARLAND—FORT BEND COUNTY

Dewalt Oil Co.'s No. 1 Peterson ..... Derrick.

HIGH ISLAND—GALVESTON COUNTY

Yount Lee Oil Co.'s No. 1-B Broussard & Orme, 126 ft. E of center of W line of M. Dunman Sur. ..... T.D. 6,191 ft.; abd.
Yount Lee Oil Co.'s No. 37 Cade, N. Fitzsimmons Sur., 600 ft. S of No. 36 ..... Drlg. gumbo 1,900 ft.

Yount Lee Oil Co.'s No. 1-B Cade, N. Fitzsimmons Sur., 488 ft. from S line, 320 ft. from E line ..... Cmtd. 5,910 ft.
Yount Lee Oil Co.'s No. 1 B. Smith ..... Drlg. gumbo 1,925 ft.

ARIOLA—HARDIN COUNTY

Republic-Houston Oil Co.'s No. 4 Ariola, 800 ft. NE of No. 1, Ariola Sur. ..... T.D. 4,794 ft. in salt; P.B. to 4,130 ft.; blew out of control; est. at 4,000 bbls. a day; 30,000,000 ft. of gas.

SARATOGA—HARDIN COUNTY

Rio Bravo Oil Co.'s No. 102 Jordit, Jordit Sur. ..... Drlg. gumbo 595 ft.

SOUR LAKE—HARDIN COUNTY

Arlis Pet. Co.'s No. 1 Sour Lake Bank, H.&T.C. Sur., NW cor. Blk. 11, Sec. 69 ..... Drlg. shale 1,915 ft.

GOOSE CREEK—HARRIS COUNTY

Gulf Prod. Co.'s No. 17-A Tabb, Wm. Scott Sur., 1,288 ft. N line, 50 ft. E line (W.O.) ..... Rigging.

HOCKLEY—HARRIS COUNTY

John Deering's No. 4 Warren, T. A. Scully Sur., 250 ft. SW of Texas Co.'s No. 3 Warren ..... T.D. 1,454 ft.; abd.

HUMBLE—HARRIS COUNTY

Texas Co.'s No. 24 Koehler (O.W.D.D.) ..... Coring sticky shale 2,986 ft.
Wilson Pet. Co.'s No. 1 Cicero (W.O.) ..... Drlg. sand 4,578 ft.

MYKAWA—HARRIS COUNTY

Crown-Framer Oil Co.'s No. 4 Minnetex, Wm. Lovett Sur., 165 ft. S, 120 ft. W of NE cor. Blk. 193 ..... T.D. 6,530 ft.; P.B. to 5,250 ft.; sidetracked; drlg. new hole 6,048 ft.

PIERCE JUNCTION—HARRIS COUNTY

Moody Corp.'s No. 4-A Whitehead ..... Drlg. salt 4,038 ft.
Rio Bravo Oil Co.'s No. 19-A Settegast (D.D.), J. Kopman Sur. No. 44, 2,585 ft. S, 385 ft. W of NE cor. of "A" lease ..... Drlg. sand 4,452 ft.
White & Ward's No. 1 Bullock ..... Drlg. 3,740 ft.

TOMBALL—HARRIS COUNTY

Humble O. & R. Co.'s No. 2 Bloecher, C. Goodrich Sur., center of 17-ac. tract ..... Drlg. shale 935 ft.
Humble Oil & R. Co.'s No. 1 Fredericks, center 18-ac. tract, J. M. Hooper Sur. ..... Drlg. sand 5,527 ft.
Humble O. & R. Co.'s No. 1 Theis, 600 ft. N of S line, 500 ft. E of W line, 100-ac. tract, C. Goodrich Sur. Drlg. shale 4,857 ft.
Texas Co.'s No. 1 H. Martens, C. Goodrich Sur., 666 ft. W, 300 ft. N of SE cor. of lease ..... Cmtd. csg. 5,552 ft.

FANNETT—JEFFERSON COUNTY

Black Gold Oil Co.'s No. 1 Jackson, Wm. Smith Sur., 3,766 ft. S line, 117 ft. from W line (356) ..... Derrick.
Gulf Prod. Co.'s No. 7 Burrell, W. H. Smith Sur., 150 ft. W of No. 6 ..... Drlg. sand 3,018 ft.
Gulf Prod. Co.'s No. 13 Thomas, W. H. Smith Sur. ... Drlg. sand 4,199 ft.; S.O.

ESPERSON—LIBERTY COUNTY

Cranfill-Reynolds Co.'s No. 7 Davis (W.O.), Duncan Sur. Drlg. shale 7,037 ft.
Cranfill-Reynolds Co.'s No. 11 Moores Bluff, Duncan Sur., 2,100 ft. from N line, 1,069 ft. from E line of 632-ac. tract ..... T.D. 4,460 ft.; P.B. to 4,454 ft.; swbng. oil and wtr.

HANKAMER—LIBERTY COUNTY

Gulf Prod. Co.'s No. 2 Crowe & Jacobs, 1,700 ft. E, 1,050 ft. N of SW cor. of H.&T.C. Sur. No. 21 ..... Drlg. sand 6,024 ft.

HULL—LIBERTY COUNTY

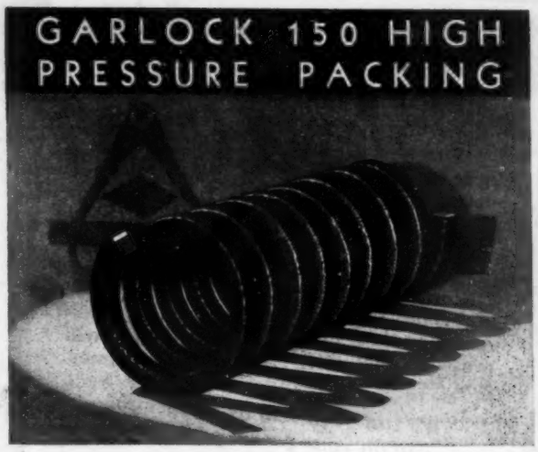
Eclipse Oil Co.'s No. 1 Ward, (W.O.) Jesse Devore Sur., 50 ft. S, 50 ft. W of NE cor. Empire G. & F. Co.'s 13 acres ..... Drlg. sticky shale 6,159 ft.
W. B. Flynn's No. 2 Flynn, J. Devore Sur., 25 ft. S No. 1. Drlg. sandy shale 1,533 ft.
Houston Prod. Co.'s No. 2 Orgain, 300 ft. E of No. 1 .. Derrick.
Humble O. & R. Co.'s No. 1 Hannah, 204 ft. N, 312 ft. W, SE cor. of lease ..... Drlg. shale 4,064 ft.
Miramar Oil Corp.'s No. 3 Phoenix Dev. Co., Jesse Devore Sur., 400 ft. due E of No. 1 Phoenix Dev. .... Drlg. sand 425 ft.
Republic Prod. Co.'s No. 149 Dolbear (W.O.), Jesse Devore Sur., 250 ft. W of No. 6 ..... Drlg. sand 2,912 ft.
The Texas Co.'s No. 8 Hannah (W.O.), Jesse DeVore Sur. ..... T.D. 5,133 ft.; to set whipstock at 4,000 ft.

LIBERTY FIELD—LIBERTY COUNTY

Ross Oil Co.'s No. 1 Richardson, M. G. White Sur., 120 ft. E of Gulf-Humble's No. 1 Carter ..... Derrick.

CONROE—MONTGOMERY COUNTY

Alpha Oil Co.'s No. 10 Keystone Mills, L. Smith Sur., 755 ft. NE of No. 5 ..... Comp. 75 bbls., hr.; ½-in. choke, 5,130 ft.
Alpha Oil Co.'s No. 3 South Texas ..... No report.
Brown & Wheeler's No. 1 Gilbert, J. A. Davis Sur., 1,050 ft. S, 4,327 ft. W of lease ..... Derrick.
Feltex Oil Co.'s No. 4 Kirby-Bertrand ..... Fishing 5,130 ft.
Gulf Coast Drlg. & Prod. Co.'s No. 2 J. L. Hensley, A. Steele Sur., 466 ft. S line in center E and W of strip ..... Derrick.
Gulf Coast Drlg. & Prod. Co.'s No. 12 Keystone Mills, A. James Sur., 467 ft. W line, 933 ft. S of No. 11. Drlg. 5,148 ft.
Gulf Oil & Sulphur Co.'s No. 2 Springfield, J. S. Springfield Sur., 466 ft. from SW line, 100-ac. lease ..... Derrick.
Gulf Coast Drlg. & Prod. Co.'s No. 5 Keystone Mills ... Cmtd. 5,014 ft.
Harrison & Abercrombie's No. 6 Massey, 466 ft. S and E lines of lease, T.&N.O. Sur. ..... Drlg. shale 2,535 ft.
Houston Oil Co.-Tide Water Oil Co.'s No. 8 Hamman, C. B. Stewart Sur., 1,214 ft. from W line, 1,690 ft. from S line ..... Comp. 13 bbls. per hr.; T.D. 5,146 ft.
Houston Oil Co.-Tide Water Oil Co.'s No. 9 Hamman.. T.D. 5,162 ft.
Humble O. & R. Co.'s No. 11 Dobbins ..... Drlg. shale 5,054 ft.
Humble O. & R. Co.'s No. 12 Madeley, Ransom House Sur., 800 ft. N line, 1,310 ft. W line of tract ..... Drlg. shale 4,700 ft.
Humble O. & R. Co.'s No. 24 Madeley, Ransom House Sur., 933 ft. SE of No. 5 ..... Blew out; T.D. 5,130 ft.; abd.
Humble O. & R. Co.'s No. 25 Madeley, Ransom House Sur., 933 ft. S of No. 15 ..... Drlg. shale 2,747 ft.
Humble O. & R. Co.'s No. 4 T. B. McComb, L. Smith Sur., 650 ft. W line, 1,100 ft. S line ..... Drlg. shale 5,000 ft.
Humble O. & R. Co.'s No. 5 L. B. McComb, L. Smith Sur., 650 ft. N line, 1,200 ft. W line ..... Drlg. shale 5,022 ft.
Humble O. & R. Co.'s No. 34 Moore, L. Smith Sur., 933 ft. SW of No. 21 ..... Drlg. sand 5,050 ft.
Humble O. & R. Co.'s No. 37 Moore, L. Smith Sur., 735 ft. NE of No. 21 ..... Comp. 84 bbls. per hr.; ½-in. choke; T.D. 5,124 ft.
Humble O. & R. Co.'s No. 43 Moore, L. Smith Sur. ..... Drlg. sand 5,091 ft.
Humble O. & R. Co.'s No. 41 South Tex. Dev. Co., Theodore Slade Sur., 933 ft. SW of No. 4 ..... Comp. 87 bbls. per hr.; ½-in. choke; T.D. 5,154 ft.
Humble O. & R. Co.'s No. 48 South Texas Dev. Co., Theo. Slade Sur., 951 ft. SE of No. 1, 951 ft. NE of No. 7 ..... Drlg. shale 2,525 ft.
Humble O. & R. Co.'s No. 1 B. Williams ..... Drlg. shale 3,200 ft.
Humble O. & R. Co.'s No. 2 J. Wiggins, T. M. Wiggins Sur., 330 ft E line, 600 ft. S line ..... Sand 5,151 ft.
Mortex Oil Corp.'s No. 1 J. C. Young, Wilson Strickland Sur., 231 ft. from E line, 131 ft. from S line of 2½ acres ..... Drlg. shale 5,079 ft.
Republic Prod. Co.'s No. 3 Griffin, Wilson Strickland Sur., 558 ft. W of Showers & Moncrief's No. 1-B Dunn ..... Drlg. shale 5,068 ft.
Showers & Moncrief's No. 2-A Dunn, 466 ft. N line, 430 ft. E line, Wilson Strickland Sur. ..... Sand 5,123 ft.
R. D. Simonton, rec.'s No. 3 Hooper, J. W. Watson Sur., C of N 20 acres of 60-ac. lease ..... Shale 5,115 ft.
Strake Pet. Corp.'s No. 2 Etheridge, S. H. Bryan Sur., 467 ft. E line, 3,350 ft. S line lease ..... Drlg. shale 2,135 ft.
Strake Pet. Co.'s No. 3 Keystone Mills, S. H. Bryan Sur... Drlg. shale 4,683 ft.
Sun Oil Co.'s No. 12 Foster, J. Bricker Sur., 1,400 ft. SE of No. 13 ..... Drlg. shale 4,210 ft.
Sun Oil Co.'s No. 33 Foster, J. Bricker Sur., 1,358 ft. S, 1,613 ft. E of lease and survey line ..... Drlg. shale 3,360 ft.



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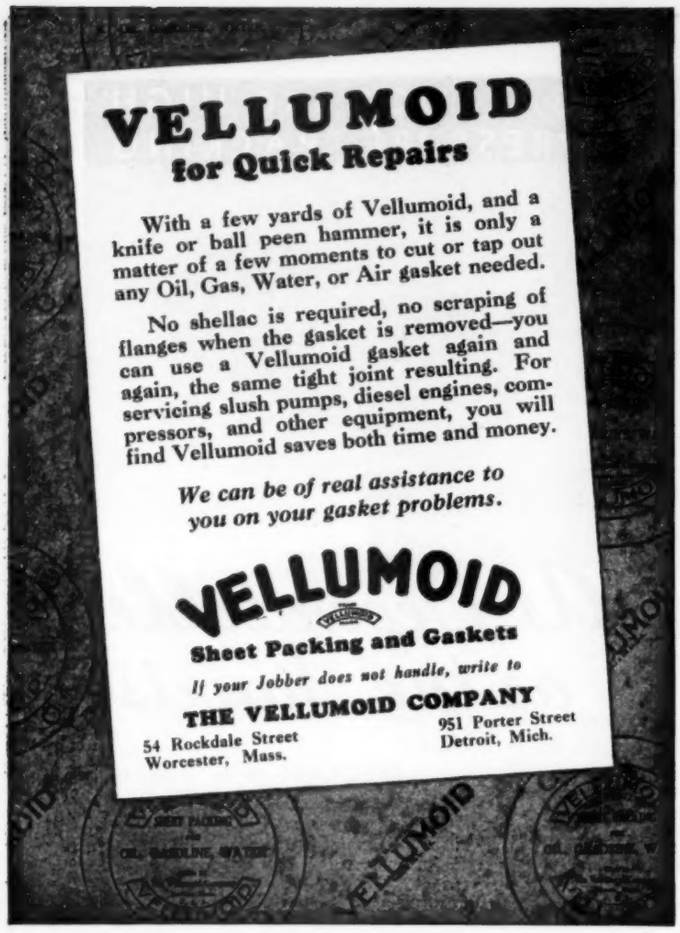
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Sun Oil Co.'s No. 1 Keystone Mills, 433 ft. S of N line, 429 ft. W of E line ..... Sand 5,130 ft.
Sun Oil Co.'s No. 2 Keystone Mills, 429 ft. E line, 1,101 ft. S of No. 1 ..... Sand 5,132 ft.
Sun Oil Co.'s No. 3 Keystone Mills, 429 ft. E line, 1,534 ft. S line ..... Drlg. shale 5,069 ft.
Sun Oil Co.'s No. 5 Keystone Mills, 1,271 ft. E line, 433 ft. W line ..... Drlg. sand 5,026 ft.
West Prod. Co.'s No. 1 Foster Lbr. Co., 467 ft. N line, 650 ft. W line, Sec. 3, T.&N.O. Sur. ..... Drlg. sand 5,131 ft.

ORANGE—ORANGE COUNTY

Gulf Prod. Co.'s No. 12 Hager-Moore (W.O.) ..... Drlg. sandy shale 4,060 ft.

PORT NECHES—ORANGE COUNTY

Texas Co.'s No. 1-B Polk, Jacob Beaumont Sur., 150 ft. NE cor. ..... Drlg. gumbo 1,288 ft.
Texas Co.'s No. 2-B Polk, 695 ft. N, 150 ft. S of NE cor. of N. Jacob Beaumont Sur. ..... Rigging.
Texas Co.'s No. 4 Kuhn, 150 ft. E, 150 ft. N of NW cor. of lease ..... Derrick.

LIVINGSTON—POLK COUNTY

Vick Borsodi et al's No. 1 West, E 3½ acres of 35 acres, Roberts tract, A. Viesca Sur. ..... Rigging.
Gist Oil Co.'s No. 1 Kavanaugh Collins, A. Viesca Sur., 150 ft. NE, 150 ft. NW, SE cor. G. P. Reid's 740-ac. tract ..... Tested S.W. 4,387 ft.; standing.
Humble O. & R. Co.'s No. 1 Grandbury, 1,320 ft. N, center E and W of 50-ac. tract ..... Derrick.
Shell Pet. Corp.'s No. 2 Davis & Holmes, A. Viesca Sur., 485 ft. N, 376 ft. W of NE cor. of Jim Duff 35-ac. tract ..... Comp. 150 bbls.; T.D. 4,400 ft.
Skelly Oil Co.'s No. 1 Sanders, 755 ft. N of E line, 305 ft. S of N line, Sanders' 40 acres, A. Viesca Sur. ..... Made est. 5,000,000 ft. gas and 25 bbls. oil daily; T.D. 4,315 ft.; killed well to shut off gas.

GRETA—REFUGIO COUNTY

Atlantic-Alamo's No. 1 J. J. O'Brien, E. H. Winfield Sur., 466 ft. out of NW cor. 167-ac. lease ..... Comp. 65 bbls. per day; ⅝-in. choke; T.D. 4,394 ft.
Atlantic and Alamo Oil Co.'s No. 1-E J. M. O'Brien, 340 ft. S line, 466 ft. E line ..... Cmtd. csg. 1,087 ft.
Atlantic-Alamo's No. 2-E O'Brien, 933 ft. N of No. 1, 466 ft. E line ..... Derrick.
Atlantic-Alamo's No. 3-E O'Brien, 933 ft. from No. 2, 466 ft. E line ..... Derrick.
Atlantic-Alamo's No. 5-E O'Brien, 933 ft. N of No. 4, 312 ft. E line ..... Drlg. gumbo 1,251 ft.
Atlantic Oil Prod. Co.'s No. 2-C O'Brien, 1,992 ft. N of No. 1 ..... Spudding.
Atlantic Oil Prod. Co.'s No. 3-C O'Brien, 2,788 ft. S of W line, 625 ft. W of E line ..... Drlg. gumbo 960 ft.
Atlantic Oil Prod. Co.'s No. 4-C O'Brien, 466 ft. out of NE cor. ..... Derrick.
Atlantic Oil Prod. Co.'s No. 5-C O'Brien, 1,193 ft. S of N line, 628 ft. E line ..... Derrick.
Atlantic Oil Prod. Co. and Heyser & Heard's No. 2 O'Brien ..... Drlg. sand 400 ft.
Circle W Oil Co.'s No. 3 O'Brien, 795 ft. S of No. 4, 466 ft. E line ..... Drlg. shale 3,110 ft.
Circle W Oil Co.'s No. 4 O'Brien, 795 ft. S of No. 2, 466 ft. E line ..... Drlg. shale 1,610 ft.
Dash Prod. Co.'s No. 3 O'Brien, N. S. Crunk Sur., 645 ft. of W line, 301 ft. at right angles R.R. ..... Setting liner; T.D. 4,391 ft; S.O.
Floboots Oil Corp.'s No. 1-C O'Brien, E. H. Winfield Sur., 466 ft. SE cor. Lot 14 ..... Drlg. sand 4,379 ft.
Floboots Oil Corp.'s No. 2-C O'Brien, 466 ft. out of SW cor. Lot 12 ..... Drlg. shale 250 ft.
Floboots Oil Corp.'s No. 1-B O'Brien, 466 ft. out of SW cor. ..... Drlg. shale 1,335 ft.
Greta Oil Corp.'s No. 1-C O'Brien, 250 ft. S line, 150 ft. E at right angles to highway ..... Drlg. shale 160 ft.
Greta Oil Co.'s No. 2 B. O'Brien, 933 ft. E of No. 1 B. ..... Drlg. shale 2,218 ft.
Greta Oil Corp.'s No. 3-B O'Brien, 1,154 ft. E of No. 2-B, 460 ft. S of N line, 460 ft. NW of E line ..... Drlg. shale 2,566 ft.
Greta Oil Corp.'s No. 4-B O'Brien, 466 ft. NW of E line, 1,516 ft. E of W line, E. H. Winfield Sur. .... Drlg. sand 4,376 ft.
Humble O. & R. Co.'s No. 1 F. Heard, 466 ft. out of NW cor. Ximines Sur. ..... Derrick.
Edwin M. Jones' No. 1 A. O'Brien ..... Comp. 500 bbls.; 7/64-in. and 5/-16-in. choke; T.D. 4,343 ft.
Edwin M. Jones' No. 2 O'Brien, E. H. Winfield Sur., Blk. 4, 466 ft. from N line in center E and W ..... Spudded.
Edwin M. Jones' No. 3-G O'Brien ..... Derrick.
Nesral Oil Co.'s No. 1-A Wilson Heard, M. J. Ximines Sur., 330 ft. out of NE cor. lease ..... Comp. 400 bbls.; 5,911-20 ft.; ¼-in. choke.
Nesral Oil Co.'s No. 1 Ira Heard, M. J. Ximines Sur., 330 ft. out of NW cor. of 25-ac. tract ..... Drlg. shale 1,950 ft.
Nesral Oil Co.'s No. 2 O'Connor, 1,586 ft. SE of No. 1 and 466 ft. W of E line (R/A to EL) ..... Drlg. shale 2,050 ft.
Nesral Oil Co.'s No. 5 O'Connor ..... Derrick.
Rutherford and Atlantic's No. 2-B O'Brien ..... Drlg. shale 1,310 ft.
Southwest Oil Corp.'s No. 1-E O'Brien, E. H. Winfield Sur., 466 ft. E of W line, 466 ft. S of N line. Drlg. shale 2,210 ft.
Southwest Pet. Corp.'s No. 2-A O'Brien, E. H. Winfield Sur., 466 ft. NW cor. 25-ac. tract ..... Drlg. shale 1,256 ft.
Texas Gulf Prod. Co.'s No. 1 J. M. O'Brien, J. A. Peoples Sur., 466 ft. SW cor., Blk. 3 ..... Drlg. shale 4,269 ft.
Texas Gulf Prod. Co.'s No. 2 J. M. O'Brien, J. A. Peoples Sur., 466 ft. NW cor., Blk. 3 ..... Moving in material.
Texas Gulf Prod. Co.'s No. 1 J. M. O'Brien, J. H. Winfield Sur., 466 ft. NS line, center E and W, Blk. 13 ..... Moving in material.
United Prod. Co.'s No. 6 Fox est., Wm. Hews and L. Brown Sur., 2,956 ft. N line, 787 ft. E line ..... Drlg. sand 4,390 ft.
United Prod. Co.'s No. 8 Fox est., 1,473 ft. N, 466 ft. E of SE cor. N. S. Cronk Sur. ..... Drlg. shale 1,218 ft.

CLAY CREEK—WASHINGTON COUNTY

Sun Oil Co.'s No. 9 Clay, 600 ft. NE of No. 1 Clay, J. F. Perry Sur., 757-ac. tract ..... Drlg. shale 2,135 ft.

BOLING—WHARTON COUNTY

Asher et al's No. 2 Rogers, S. F. Austin Sur., 685 ft. NE, 115 ft. NW of S cor. W. G. Reagin & Son's tract. Drlg. gumbo 1,015 ft.

SOUTH LOUISIANA FIELDS

ASSUMPTION PARISH

Barnsdall Oil Co.'s No. 1 Williams, 330 ft. out of NE cor. Sec. 38-14s-14e ..... T.D. 7,465 ft.; hole bridged at 5,900 ft.

VINTON—CALCASIEU PARISH

Wilson Breach's No. 10 Wilson Strip, 650 ft. N, 379 ft. E. SW cor. SE NE Sec. 33-10s-12w ..... Derrick.
Gulf Ref. Co.'s No. 7 J. W. Gardner, 308 ft. E, 550 ft. N, SW cor. SE NE Sec. 33-10s-12w ..... Drlg. sand 3,660 ft.; no show.
Marrs-McLean's No. 12 Gray (W.O.) ..... Drlg. sand 2,739 ft.; show oil.
Vinton Pet. Co.'s No. 22 Vincent, 685 ft. N, 620 ft. E of SW cor. Sec. 34-10s-12w ..... Drlg. shale 2,723 ft.

CAMERON MEADOWS—CAMERON PARISH

Burton-Sutton Oil Co.'s No. 1 School Land, 500 ft. W, 20 ft. N, SE cor. Sec. 16-14s-13w ..... Drlg. sand 6,495 ft.
Humble O. & R. Co.'s No. 4 Cameron Meadows, 360 ft. N, 600 ft. W, SE cor. Sec. 21-14s-13w ..... Moving in rig.

CALCASIEU PARISH

Fred Oil Co.'s No. 1 Farszt, 566 ft. N, 300 ft. W, SE cor. NW SE Sec. 26-8s-10w ..... Rigging.
Union Sulphur Co.'s No. 1 Stout, 1,337 ft. N, 1,167 ft. W of SE cor. Sec. 36-9s-9w ..... Drlg. sand 7,527 ft.

CHOCTAW—IBERVILLE PARISH

Standard Oil Co. of La.'s No. 5 Myrtle Grove, 1,700 ft. N, 200 ft. W, SE SW cor. SW Sec. 52-9s-11e ..... Spudding.

EDGERLY—CALCASIEU PARISH

S. A. Emerson's No. 13 Hunter, 465 ft. N, 90 ft. E, SW cor. Sec. 21-9s-11w (W.O.) ..... Drlg. sand 4,118 ft.

EVANGELINE PARISH

J. E. Leadau's No. 2 Vidrine, 260 ft. W, 400 ft. S, NE cor. Sec. 47-3s-2e ..... Standing 1,740 ft.

GUEYDAN—VERMILLION PARISH

Pure Oil Co.'s No. 5 Alliance Trust Co., 525 ft. from N line, 580 ft. from W line of Sec. 34-11s-1w ..... Fishing 4,767 ft.

Pure Oil Co.'s No. 1 Grady Lee-Humble, 2,031 ft. E. 225 ft. N of NW cor. Sec. 34, in Sec. 27-11s-1w... Drlg. shale 2,680 ft.

Pure Oil Co.'s No. 4 Mulvey, 1,721 ft. from N line, 2,515 ft. from W line of Sec. 34-11s-1w ..... Drlg. limestone 4,554 ft.

LAFOURCHE PARISH

Gulf Ref. Co.'s No. 1 B. Community, 1,685 ft. E, 365 ft. NW Sec. 28-21s-22e ..... Drlg. shale 1,990 ft.

Barnsdall Oil Co.'s No. 1 Harang, Lot 6, in Twp. 17s-20e Drlg. shale 4,944 ft.

LAKE BARRE—TERREBONNE PARISH

Texas Co.'s No. 9 Lake Barre-L.L.&E., 4,013 ft. S, 365 ft. E of NW cor. Sec. 30-21s-20e in Sec. 36-21s-19e ..... Drlg. anhydrite 2,903 ft.

Texas Co.'s No. 22 State-Lake Barre, 150 ft. northerly from No. 18 ..... Drlg. lime and shale 3,791 ft.

LAKE WASHINGTON—PLAQUEMINES PARISH

Freeport Sulphur Co.'s No. 14 Cockrell & Morrow ..... Standing 1,310 ft.

Humble O. & R. Co.'s No. 3 La. State, Twp. 20s-26e, 2,920 ft. N, 19 ft. E of station ..... Cmtd. csg. 205 ft.

LOCKPORT—CALCASIEU PARISH

Magnolia's No. 9 Farquaher, 200 ft. N, 150 ft. E of SW cor. NE SE Sec. 8-10s-9w (O.W.D.D.) ..... No report.

Magnolia Pet. Co.'s No. 4-A Watkins fee, 685 ft. E, 200 ft. N of SW cor. NW NE Sec. 9-10s-9w ..... No report.

HACKBERRY—CAMERON PARISH

Gulf Ref. Co.'s No. 12 Irwin, 865 ft. N, 518 ft. E of SW cor. Sec. 44-12s-9w ..... Drlg. hard shale 7,255 ft.

Pop Oil Co.'s No. 1 Yount Lee, 3,996 ft. W, 100 ft. N of SE cor. Sec. 19-12-10w ..... Drlg. shale 3,922 ft.

Texas Co.'s No. 10-B State, 1,000 ft. E, 200 ft. N of NE cor. Sec. 13-12s-10w ..... Sand 7,272 ft.; swabbing.

Union Sulphur Co.'s No. 7 Gulf Land-Humble lease, 1,010 ft. N, 661 ft. E of SW cor. Sec. 12-12s-10w... Drlg. sand 6,140 ft.

IOWA—CALCASIEU AND JEFF DAVIS PARISHES

Barnsdall Oil Co.'s No. 1 Heyd, 330 ft. SW cor. of E½ SW Sec. 7-9s-6w ..... Drlg. sandy shale 2,236 ft.

Magnolia Pet. Co.'s No. 4 Waite, Sec. 12-9s-7w, 330 ft. from E line, 660 ft. S of No. 3 ..... Comp. 950 bbls.; ¼-in. choke; T. D. 6,921 ft.

Magnolia Pet. Co.'s No. 2 Willett, 990 ft. N, 330 ft. E of SW cor. NW Sec. 7-9s-6w ..... Drlg. sand 7,017 ft.

Shell Pet. Corp.'s No. 5 Heyd, 325 ft. S of NW cor. of Sec. 18-9s-7w, and 325 ft. W of E line of Sec. 13.. Drlg. sand 6,598 ft.

Shell Pet. Corp.'s No. 6 Heyd, 660 ft. S line, 660 ft. W line of lease, Sec. 18-9s-7w ..... Drlg. shale 4,441 ft.

Shell Pet. Corp.'s No. 2 Stafford, 330 ft. from W line and 265 ft. from S line of NW Sec. 18-9s-6w ..... Drlg. shale 6,500 ft.

Shell Pet. Corp.'s No. 1 Tuten, 265 ft. S, 330 ft. W of NE cor. SW Sec. 13-9s-7w ..... Temp. S.D. 1,337 ft.

JEFFERSON DAVIS PARISH

B. D. Finley et al's No. 1 Clarphy Lognion, SW NW Sec. 22-10s-4w, 800 ft. N, 50 ft. W of SW NW ..... T.D. 5,465 ft.; standing.

Humble O. & R. Co.'s No. 2 Devilbiss, 1,850 ft. S, 350 ft. W of NE cor. Sec. 14-9s-4w ..... T.D. 7,843 ft.; sidetracked 7,100-7,581 ft.; fishing.

JENNINGS—ACADIA PARISH

Yount Lee Oil Co.'s No. 13 Houssiere-Latrielle, Sec. 47-9s-2w, 300 ft. E of No. 12 ..... Drlg. anhydrite 5,215 ft.

EAST BATON ROUGE PARISH

British-American Oil Co.'s No. 1 Louisiana, 2,750 ft. NE NW cor. Sec. 79, and 1,700 ft. N of NE Sec. 79, in Sec. 6-8s-1e ..... Drlg. shale 4,010 ft.

LEESVILLE—LA FOURCHE PARISH

Texas Co.'s No. 7 L.L.E., 2,921 ft. S, 300 ft. W of NE cor. Sec. 27-21s-22e ..... Drlg. sand 3,143 ft.

PORT BARRE—ST. LANDRY PARISH

Campbell et al's No. 1 J. E. Jeonsonne, Sec. 7-6s-5e, 30 ft. N of S line in center E and W of 30-ac. tract.. Drlg. sand 3,770 ft.

Texas Co.'s No. 17 Botney Bay, 1,300 ft. S 8 deg. W, 600 ft. N 82 deg. most southern NE 560 deg. tract, Sec. 4-6s-5e ..... Derrick.

PLAQUEMINES PARISH

Humble O. & R. Co.'s No. 11 Cockrell & Moran ..... Drlg. gumbo 322 ft.

Humble O. & R. Co.'s No. 12 Cockrell & Moran ..... Standing 1,169 ft.

Southern Sulphur Co.'s No. 1 Bay Adams ..... Rig.

Texas Co.'s No. 9 Garden Island Bay, 4,791 ft. S, 2,504 ft. W of NE cor. Sec. 104-33s-32e ..... Drlg. cap rock 2,007 ft.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 1 Lacey Fraink, 1,640 ft. N, 1,175 ft. W, SE cor. Sec. 16-10s-4e ..... T.D. 1,400 ft.; fishing.

STARKS—CALCASIEU PARISH

Gulf Ref. Co.'s No. 11 Lutcher-Moore (D.D.), 1,370 ft. W, 885 ft. N of SE cor. NE Sec. 19-9s-12w..... Drlg. sticky shale 4,342 ft.

Union Sulphur Co.'s No. 3 Industrial Lbr. Co., 2,400 ft. N, 412 ft. W, SE cor. Sec. 19-9s-12w ..... Drlg. sand 2,477 ft.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 779 fee, 1,153 ft. N, 795 ft. E of center of Sec. 29-9s-10 ..... Drlg. shale 1,271 ft.

Union Sulphur Co.'s No. 783 fee, Sec. 29-9s-10w ..... Salt 5,177-5,761 ft.; drlg. new hole 4,252 ft.

Union Sulphur Co.'s No. 781 fee, 1,768 ft. W, 736 ft. N of C Sec. 29-9s-10w ..... Derrick.

ST. BERNARD PARISH

Southern Sulphur Co.'s No. 1 Lake Lery, 400 ft. W, 500 ft. N, SW cor. Sec. 28-13s-15e ..... Cmtd. csg. 212 ft.

Southern Sulphur Co.'s No. 1 State Lake Bargne, 850 ft. N, 230 ft. E, SE cor. Sec. 33-13s-15e ..... Cmtd. csg. 650 ft.

ST. LANDRY PARISH

Gaunch Synd.'s No. 1 Lewis, 300 ft. N and E of SW cor. NW NE Sec. 29-5s-6e ..... Derrick.

H. H. Hotchins Lbr. Co.'s No. 1 Whiteman Lbr. Co., 250 ft. out of SW cor. NE Sec. 15-5s-6e ..... Cmtd. csg. 710 ft.

ST. MARTIN PARISH

Standard Oil Co. of Kansas' No. 1 E. B. Hopkins, Sec. 33-10s-6e ..... Cmtd. 6,010 ft.

TERREBONNE PARISH

Texas Co.'s No. 6 State Bay-St. Elaine, 700 ft. S of No. 3, Sec. 17-22s-18e ..... Drlg. heaving shale 4,334 ft.

Texas Co.'s No. 1 State Bay-St. Elaine, 3,900 ft. N, 2,300 ft. E of SW cor. Sec. 8-22s-18e ..... Moving in.

VERNON PARISH

E. Dawson's No. 1 Delta Land & Timber Co., C SW SW Sec. 2-1n-11e ..... T.D. 2,820 ft.; sidetrack 2,615 ft; drlg. new hole, shale 2,703 ft.

R. E. Kay et al's No. 1 Willis, 350 ft. N, 400 ft. E, SW cor. SE SE Sec. 32-3-9w ..... Standing 3,775 ft.

WHITE CASTLE—IBERVILE PARISH

Shell Pet. Corp.'s No. 7 Wilburn, 625 ft. N 60 deg. W, 1,165 ft. N 29 deg. E, SE of Lot 2, Sec. 9-11s-12e... Drlg. shale 3,400 ft.

TEXAS

MISCELLANEOUS WILDCATS

AUSTIN COUNTY

R. R. Mitchell's No. 1 H. Schlerda, J. F. Fitzgibbons Sur., 300 ft. out NE cor. 96-ac. tract ..... Moving in material.

BRAZOS COUNTY

H. Elliott et al's No. 1 W. F. Odom, near center of 379-ac. tract in SW cor. of Isaac Curll Sur. ..... Derrick.

F. H. Scott's No. 1 Klintworth, I. Curd Sur., 300 ft. from N line, 400 ft. from E line ..... Showing gas 1,470-92 ft.; to test.

CHAMBERS COUNTY

Smith & Lavender's No. 1 McCormick, F. Ludlow Sur., 150 ft. NE cor. ..... Derrick.

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COLORADO COUNTY

Columbus Dev. Co.'s No. 1 Miller, H.T.&B. No. 8, 2,268 ft. E of W line, 1,345 ft. S of N line of survey.. Drlg. 209 ft.
Humble O. & R. Co.'s No. 1-C Powell, I.&G.N.R.R. Sur., 1,086 ft. E, 578 ft. S of NW cor. Blk. 48..... Drlg. shale 4,700 ft.
Weimar Oil Co.'s No. 1 Miller ranch, approx. center H.&T.B. Sur. No. 9 ..... Derrick.

FORT BEND COUNTY

Fresno Oil Corp.'s No. 1 M. T. Wood, T. Gleason Sur., center of 10-ac. tract (Blk. 474) ..... T.D. 5,082 ft.; standing.
Quintana Oil Co. and Great So. Life's No. 1 Great So. Life, E. Robertson Sur., 500 ft. S of N line, 500 ft. W of Brazos River ..... Drlg. 3,000 ft.

GRIMES COUNTY

Clark & Dodd's No. 1 Murry, 150 ft. W line, 300 ft. S line, Anderson Sur. ..... Spudded.
Cambrian Oil Co.'s No. 1 W. V. Sangster, John Moore Sur., 300 ft. out of most westerly NW cor. of 218-ac. tract ..... Derrick.
Foster et al's No. 1 Quinn, 7,100 ft. from W line, 3,900 ft. from N line of S. F. Austin Sur. ..... Standing 65 ft.
Humble O. & R. Co.'s No. 1 Seaton, F. G. Seaton Sur., 360 ft. N and W, 71-ac. tract ..... Rigging.

HARRIS COUNTY

Cockburn Oil Corp.'s No. 1 C. Marcus, Wm. Hardin Sur., 1,500 ft. S along E line of 55-ac. tract from Buffalo Bayou and 300 ft. W at right angles ..... Drlg. sticky shale 6,005 ft.
Hamilton et al's No. 1 Hargroves, W.C.R.R. Sur. No. 10, Blk. 1, 1,750 ft. E line, 645 ft. N line ..... Drlg. shale 5,400 ft.
J. A. Hodges' No. 1 Scott, 200 ft. S, 900 ft. W of intersection of Crosby Huffman, F. Rankin Sur. ..... Derrick.
H. B. Jordan's No. 1 Cochran, J. L. Jordan Sur., 1,950 ft. S line, 1,930 ft. E line ..... Standing 2,045 ft.
Russell et al's No. 1 Burt & Griffith, S. Keely Sur., 200 ft. N line, 200 ft. E of highway ..... Spudding.
Jack Schultz et al's No. 1 West Prod. Co., Geo. Dedrick Sur., 800 ft. W of R.R., 100 ft. N of S line .... T.D. 3,870 ft; P.B. to test 3,414 ft.
Simon & Link's No. 1 Ellis, 658 ft. from N line, 1,130 ft. from W line of Sec. 32, Geo. Ellis Sur. ..... Drlg. shale 5,340 ft.
E. E. Young et al's No. 1 Paddock, J. Cunningham Sur., 300 ft. W of E line of Blk. 41 on line dividing Blks. 46 and 47 ..... Standing 650 ft.

JACKSON COUNTY

Continental Oil Co.'s No. 1 Vincek, V. Garcia Sur., 1,800 ft. W, 200 ft. N of SE cor. of Lot 17, Bennett Subd. ..... Drlg. sand 5,610 ft.

JASPER COUNTY

Turnball & Erwin's No. 1 Green, W. B. Green Sur., 2,269.3 varas S, 857 varas W of NE cor. ..... Drlg. shale 1,190 ft.
Venza Oil Co.'s No. 1 Garland Smith, Elijah Isaacs Sur., 650 varas E of SE cor. S. Cruse Sur. ..... Drlg. shale 3,560 ft.

JEFFERSON COUNTY

Sun Oil Co.'s No. 1 Paggi, 990 ft. W, 1,610 ft. N of SE cor. of T.&N.O. Sur. No. 33 ..... Sand 6,003-23 ft.; showing oil; resetting screen to test.

LIBERTY COUNTY

Hamill & Smith's No. 1 Peavey, 2,083 ft. N, 330 ft. W of SW cor. J. S. Johnson's 319-ac. tract ..... Drlg. shale 3,738 ft.
Thomas et al's No. 1 A. Ercke, 600 ft. E of W line, 2,350 ft. N of S line, A. H. Ercke Sur. in Reason & Green Sur. ..... Standing 2,920 ft.
J. K. Seale, tr.'s No. 1 T. W. Finley, A. B. Hardin Sur., 330 ft. out of SW cor. of 25-ac. tract ..... Standing 5,000 ft.

MATAGORDA COUNTY

Continental Oil Co.'s No. 1 Boker, 400 ft. out of SW cor. Lot 17, Robbins & Middle Subd., J. W. Criswell Sur. ..... Stuck D.S. in heaving shale 6,564 ft.; fishing.
Oils Consolidated, Inc.'s No. 1 Hawkins, Daniel McCarthy Sur., 1,240 ft. NE, 350 ft. NW of S cor. .... Derrick.
United North & South Dev. Co.'s No. 1 Unit 6 (No. 3 Stoddard), 25 ft. each way out of NW cor. of Lot 19, Buckeye Townsite ..... T.D. 7,872 ft.; cutting and pulling screen.
United North & South Dev. Co.'s No. 1 Unit 14 (No. 1 Dr. Pietner), 1,310 ft. SE of No. 1 Stoddard and 136 ft. W of right of way of Collegeport branch of St. L.&R.M.R.R., Buckeye ..... T.D. 7,919 ft.; abd.
United North & South Dev. Co.'s No. 1 Unit 24, 1,335 ft. S, 1,000 ft. E of No. 1 Unit 6 ..... T.D. 7,775 ft.; setting whipstock.

MONTGOMERY COUNTY

Gholson Bros.' No. 1 Crawford, 757 ft. due S from SE cor. of Mary Guber 48-ac. tract ..... Rigging.
McElroy Oil Co.'s No. 1 McWhorter, T. J. Nichols Sur., 390 ft. N of center of W 1,000 acres of McWhorter's 3,000-ac. farm ..... Drlg. shale 4,837 ft.
L. C. Thorpe's No. 1 Sutherland, 2,450 ft. E line, 350 ft. N line of C. McRay Sur. ..... T.D. 1,800 ft.; standing.
Stanolind O. & G. Co.'s No. 1 Theis, J. H. Edwards Sur., 466 ft. W line, 466 ft. S line ..... Drlg. shale 1,156 ft.

ORANGE COUNTY

Texas Louisiana Oil Co.'s No. 1 Starks, 2,450 ft. N of NW cor. M. Delano Sur. 68, 10,500 ft. E at right angles ..... Derrick.

POLK COUNTY

D. B. McCall's No. 1 Faulkner, 350 ft. W of center of E line of 200-ac. tract, G. B. Dikes Sur. ..... Spudding.
Dick Schwab's No. 1 Kirby & West, Geraldus Thomas Sur., 1,000 ft. N of N line of P. A. Sublett Sur., and 3,000 ft. W of E line of Thomas Sur. ..... Drlg. shale 3,820 ft.
C. E. Stewart's No. 1 Stephenson, E. Stevenson Sur. (Abst. 761), 1,633 ft. from N line, 920 ft. from W line of 217 acres ..... Rig.

REFUGIO COUNTY

Humble O. & R. Co.'s No. 9 O'Connor, 4,350 ft. SW of No. 1 O'Connor ..... Drlg. shale 2,587 ft.
Texas Co.'s No. 1 Rooke, J. M. Aldritte Sur., 7,500 ft. S 53 deg. W, 850 ft. 37 deg. W of N cor. Sur. .... Drlg. shale 3,417 ft.

SAN JACINTO COUNTY

Turnball & Erwin's No. 1 Love, Love Sur., 330 ft. out of SW cor. ..... T.D. 4,720 ft.; dry and abd.

TYLER COUNTY

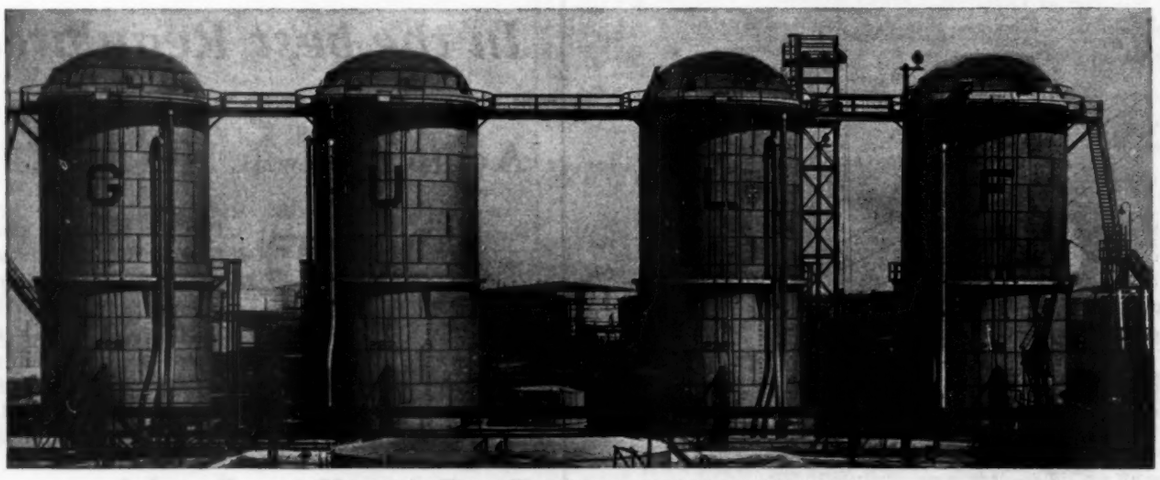
Texas Crude Oil Co.'s No. 1 Creswell, B. Enloe Sur., 300 ft. S of NE cor. of survey and 400 ft. W of E line ..... T.D. 2,070 ft.; abd.

VICTORIA COUNTY

J. F. Camp's No. 1 Maurer, 330 ft. NE cor. Maurer's 178 acres, R. Manchola Sur. ..... Rigging.
Stoneleigh O. & G. Co.'s No. 1 Dietzel, 330 ft. out of NW cor. of Dietzel's 95-ac. tract, R. Manchola Sur. Derrick.
Stoneleigh O. & G. Co.'s No. 2 E. B. Terrell, 330 ft. out of SE cor. of Terrell's 215-ac. tract, R. Manchola Sur. ..... Moving in derrick.
Stoneleigh O. & G. Co.'s No. 1 Trybble, 330 ft. out of SE cor. Trybble's 122-ac. tract, R. Manchola Sur. .. Moving in derrick.
Stoneleigh O. & G. Co.'s No. 1 Zimmer, R. Manchola Sur., 1,007 ft. SW line, 645 ft. SE line ..... T.D. 2,884 ft.; 7-in. csg. cmtd. 2,850 ft.; sand 2,850-84 ft. showing oil; drlg. cmt. plug.
The Texas Co.'s No. 6-A McFaddin, 5,600 ft. from NE line, 250 ft. from SE line of A. J. Gray ..... Gas sand 2,039-49 ft.; pumping wtr. and mud into sand to kill pressure.
The Texas Co.'s No. 7 McFaddin, 6,600 ft. S 15 deg. W, 450 ft. N 75 deg. W at right angles from the NE cor. of the A. J. Gray Sur. ..... T.D. 1,176 ft; blowing gas and mud.

WALLER COUNTY

Hobson & Moore's No. 1 Peters, Justo Liendo Sur., 590 ft. W of creek and 1,144 ft. N of S cor. ..... Shale 2,960 ft.; standing.



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GULF

GULF REFINING COMPANY

WASHINGTON COUNTY

George W. Strake's No. 1 Henry Wehmeyer, M. Byrd Sur., 3,000 ft. from W line, 500 ft. from N line of 599.50-ac. tract ..... Drlg. shale 4,406 ft.

WHARTON COUNTY

Boggs & Hammond's No. 1 C. T. Kountze, Morris & Cummings Sur., 1,250 ft. S line, 2,750 ft. E line .... Drlg. shale 4,800 ft.

Nabers et al's No. 1 Lurker, 210 ft. out of SE cor. of N½ SW Sec. 58, E.T.R.R. Sur. ..... Washing to bottom 5,026 ft.

Pure Oil Co.'s No. 1 W. Garrett, Sec. 28, 4,456 ft. SE, 1,690 ft. NE of W cor. ..... Drlg. sand 6,018 ft.

Pure Oil Co.'s No. 1 A. J. Wilder, T. W. Hurd Sur., 509, 2,575 ft. SE, 1,690 ft. NE from W cor. of Sec. 33. Drlg. sand and shale 5,530 ft.

Pure Oil Co.'s No. 1 Stewart, 3,419 ft. NW, 1,650 ft. NE of S cor. of Sec. 25, Morris & Cummings Sur. ..... T.D. 8,067 ft.; cmtd. back to sand 5,963-71 ft.; setting screen at 6,024 ft.

Pure Oil Co.'s No. 1 Chas. T. Kuntze, 2,183 ft. from NW line, 467 ft. from SW line, Sec. 27, Morris & Cummings Sur. ..... Fishing 7,134 ft.; a show at 7,-128-34 ft.

Pure Oil Co.'s No. 1 W. H. Lancaster, Morris & Cummings Sur., Sec. 23, 1,650 ft. NW, 1,600 ft. SW of E cor. of section ..... Drlg. shale 4,956 ft.

Pure Oil Co.'s No. 1 Willis McIntyre, 1,650 ft. S of N line, 1,759 ft. S of E line of section ..... Spudding.

Pure Oil Co.'s No. 1 Wallace Houston, 858 ft. SE of NW line and 1,690 ft. NE of SW line, Sec. 28, (T. W. Heard Sur.) ..... Drlg. shale 3,532 ft.

Pure Oil Co.'s No. 1 Isaac Weaver, J. M. Brownson Sur., Sec. 22, 1,650 ft. out of N cor. of section .... Drlg. shale 5,642 ft.

Smith, McDannald and Pure Oil Co.'s No. 1 B. M. Yeamans, 330 ft. out of N cor. of B. M. Yeamans Sur., Abst. 915 ..... Coring sand 6,046 ft.; no show.

Smith & McDannald and Shell Pet. Corp.'s No. 1 Ridgeway, 1,980 ft. from S, 660 ft. from W of NE cor. Sec. 8, H.&T.C. Sur. ..... T.D. 7,607 ft.; drill pipe stuck; resetting whipstock 5,590 ft.

Wildcat Operations in Southwest Texas

(Continued from Page 44)

H. A. Pagenkopf's No. 1 G. A. Goeth, 500 ft. from SE line, 600 ft. from SW line which is San Antonio River, Juan Montes Sur. ..... T.D. 1,954 ft.; setting 1,600 ft. of 6⅝-in. and 350 ft. perforated line; to comp. as gas well.

Perry, Woodie & Boler's No. 1 Milburn, 450 ft. from N line, 150 ft. from E line of 103-ac. tract in S. C. I. Perez Sur., 15 miles SW from San Antonio ..... Set surface csg.; T.D. 91 ft.

Earl A. Post's No. 3 J. F. and F. X. Bilhartz, 150 ft. from N and E lines of S 200 acres of 385-ac. tract in F. Boles Sur. ..... Moving in rig.

Roe & Day's No. 2 City Nat'l. Bank, 150 ft. from N and W lines of tract in I. Perez Sur. No. 15 ..... T.D. 350 ft.; standing.

C. A. Smith's No. 1 Henry Lamb, 750 ft. from N and E lines of Lamb farm, in de la Garza grant ..... T.D. 620 ft.; drlg.

F. E. Tegler's No. 1 Brackenridge, 578 ft. from S line, 2,284 ft. from W line of tract in Maria Gertrudis de Alanis Sur. ..... T.D. 1,221 ft.; fishing for drill stem.

BLANCO COUNTY

Blanco Development Co.'s (McGee) No. 1 A. J. Dittmar, 1,320 ft. from S line, 150 ft. from W line of George Evans Sur. No. 58, 4 miles NW of Johnson City ..... T.D. 717 ft.; fishing.

Isham et al's No. 1 Lester ranch, 200 varas from N and E lines of Antonio Bandrand Sur., 8 miles NE from Johnson City ..... T.D. 405 ft.; drlg.

CALDWELL COUNTY

Judge R. L. Batts' No. 2 Roebuck, 2,400 ft. from NE line, 1,200 ft. from SE line of tract in Arthur Swift Sur. ..... T.D. 2,268 ft.; S.D.

E. L. Hope and Joe Cole's No. 1 Mike August, 150 ft. from NE line, 165 ft. from NW line of tract ..... T.D. 1,960 ft.; coring Taylor marl; showing gas

F. L. Thomson's No. 2 Lawler, 150 ft. from NW line, 450 ft. from SW line of road in J. H. Lawler 134-ac. tract in James Berry Sur. ..... Abnd. location.

DE WITT COUNTY

C. B. Bunte, Inc.'s No. 1 Emil Buckhorn, SE cor. of 120-ac. tract in Andrew Lockhart Sur., 3 miles SW from Lindeneau ..... T.D. 540 ft.; drlg.

L. G. Wade's No. 1 fee, 6 mi. S from Yoakum, 530 ft. from NW line, 160 ft. from SW line of 35-ac. tract in Lavina Dunbar Sur. ..... T.D. 2,357 ft.; S.D.

DUVAL COUNTY

Al Buchanan et al's No. 1 Duval County Ranch Co., 1,650 ft. from E line, 990 ft. from S line of S½ of N½ of Sur. No. 206 ..... Spudded in.

DeSoto Oil Co.'s No. 3 Wood-Welder, 660 ft. E of No. 1 (950 ft. from N line, 2,640 ft. from W line of Sur. No. 211 ..... T.D. 2,502 ft.; P.B. to 2,130-56 ft; standing.

Eaton et al's No. 1 Herbst, 1,650 ft. from E line, 330 ft. from S line in S.A.&M.G. Sur. No 71 ..... Standing.

O. W. Killam's No. 1 Wood-Welder, 9,260 ft. from E line, 3,540 ft. from S line of Sur. No. 102 ..... T.D. 2,550 ft.; abnd.

S. S. & H. Oil Co.'s No. 1 Hunter, 330 ft. W of CEL of J. Poitevant Sur. No. 515 ..... T.D. 2,339 ft.; standing.

W. A. Smith's No. 1 Holzapfel, west central part of lease in 900 ft. W of NE cor. of Sur. 344 and 150 ft. from N line of Sur. No. 43 ..... T.D. 398 ft.; standing waiting on water.

Almer Stewart's No. 1 Parr, 350 ft. from E line, 200 ft. from S line of 500-ac. tract in Poitevent Sur. No. 185 ..... T.D. 2,275 ft.; drlg.

Whitting's No. 1 Duval County Ranch Co., 1,511 ft. from S line, 2,143 ft. from W line of Blk. 21, of Sur. No. 196 ..... T.D. 900 ft.; drlg.

EDWARDS COUNTY

Love and Evans' No. 1 Steve Brown, 660 ft. from N and E lines of Sec. 66, G.W.T.&P.R.R. Sur., 15 miles W of Rock Springs ..... T.D. 1,500 ft.; topped Penn. 1,-056 ft.

FRIO COUNTY

Amerada Pet. Corp.'s No. 1 Frank Doering, 34 ft. from W line, 1,700 ft. from S line of Tract No. 7 in Maria Louisa Carranza Sur. No. 202 ..... T.D. 5,225 ft.; drlg.

J. E. Greenlee's No. 3 Burns, 150 ft. from W line, 1,800 ft. from S line of SE of 160-ac. tract, Castro Sur. No. 123 ..... T.D. 2,365 ft.; standing.

GILLESPIE COUNTY

Powers et al's (Nixon-Dore) No. 1 Andrew Lindig, 18 mi. E of Fredericksburg ..... T.D. 1,194 ft.; fishing.

GUADALUPE COUNTY

Clint Lanier's No. 1 L. D. Hill, 450 ft. from NW line, 1,450 ft. from NE line of George Allen Sur. ..... T.D. 610 ft.; S.D.

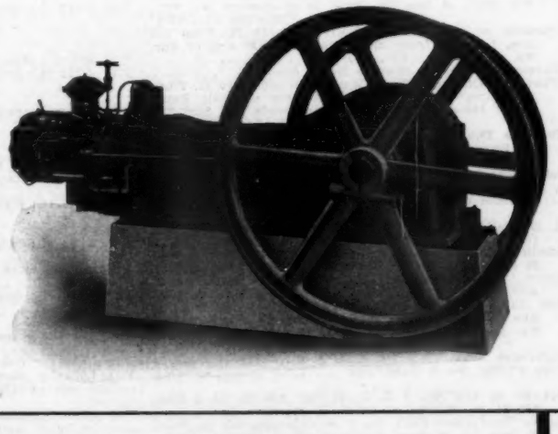
HIDALGO COUNTY

Carl & Johnston's No. 1 Doughty, 187 ft. from S and E lines of Lot 11, Blk. 5 of Subd. of Indios Ranch Sur. in N. Hidalgo ..... T.D. 3,040 ft.; S.D.

Chancellor & Hall's No. 1 Garcia Land & Cattle Co., 150 ft. from W line of Porcion 43 and 150 ft. N of old Military Highway ..... T.D. 3,187 ft.; standing.

Maxwell & Young's No. 1 King, 175 ft. from N and E lines of Lot 3, Blk. 16, Alamo tract ..... T.D. 875 ft.; drlg.

you're missing something



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HARRY WRIGHT, Geologist.
ROY L. GINTER, Cons. Chem.
A. T. WRIGHT, Field Rep.

Read the Classified Bargains on page 79 of this week's issue.

JIM HOGG COUNTY

D. C. DeWitt's No. 1 A. G. Lopez, 3,475 ft. from W line, 425 ft. from N line of Sur. No. 106 ..... T.D. 2,240 ft.; drlg.

Brooklyn Oil Co.'s No. 1 De La Garza, 660 ft. from N and W lines of Blk. 87 of Pippins Subd. of Randado Grant Sur. ..... T.D. 255 ft.; standing.

KENDALL COUNTY

E. W. Martin's No. 1 Houston, in F. Wright Sur. ..... T.D. 1,715 ft.; drlg.

KERR COUNTY

J. E. Anderson's No. 1 J. D. Witt, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 1,923, in Hamilton Sur., 4 miles S of Center Point ..... T.D. 1,885 ft.; standing in shale and sand.

Evans & Gant's No. 1 Love, 660 ft. S of S line of Sur. 1,597, 1,320 ft. from W line of Sur. 1,594 ..... T.D. 4,960 ft.; rigging up to deepen.

Van Duyn & Moore's No. 1 Nowlin, 2,000 ft. from E line, 2,200 ft. from N line of Jas. R. Bettner Sur. No. 99 ..... T.D. 985 ft.; drlg.

LA SALLE COUNTY

Pacific Gulf Oils and C. B. Bunte's No. 1 Lastinger, C of NE of Sec. 507 ..... T.D. 2,256 ft.; reached contract depth at 2,250 ft.; S.D.

W. H. Wallace's No. 1 H. C. Yeager, 150 ft. from S and E lines of Sur. No. 95 ..... T.D. 1,605 ft.; standing.

LIVE OAK COUNTY

Coquat, O'Neill & Phillips' No. 3 Sanger, 2,930 ft. from SW line, 330 ft. from SE line of Sur. No. 350..... T.D. 3,189 ft.; S.D.

J. H. Durbin's No. 2 Marbach, 1,000 ft. from S line, 3,200 ft. from W line of S. Hays Sur. ..... T.D. 904 ft.; drilled plugs after recmtng.; previously reported abd., in error.

Holland Oil Co.'s No. 1 T. J. Lynn, 175 varas from E line, 54 varas from N line of 272-ac. tract in Sur. No. 171 ..... T.D. 1,926 ft.; drlg.

M. P. Howard's No. 1 Alexander, 2,700 ft. from N line, 150 ft. from E line of 500-ac. tract, 3 miles NE of Calliham ..... T.D. 1,223 ft.; swbng.

McMULLEN COUNTY

Nixon & Foster's (C. B. Bunte) No. 1 Lowe, 1,320 ft. from NE line, 1,320 ft. from NW line, Sec. 132, A. Starr Sur. ..... Laying water line and bldg. pits.

L. W. Stieren's No. 1 Hortono, 1,000 ft. from N, 2,000 ft. from E line of Sur. on 3,089-ac. tract in J. M. Jean Sur. ..... T.D. 64 ft.; drlg.

Whisenant & Trenchard's No. 1 Martin, 1,650 ft. to E line, 2,310 ft. to S line of Sur. No. 108 ..... Spudded in.

MILAM COUNTY

Ed Clark et al's No. 1 Thomas Graves, 250 ft. from SW and NW lines of Jackson Hall Sur. ..... T.D. 890 ft.; shut down in shale.

NUECES COUNTY

S. F. Hurlbut and Southwest Oil Co.'s No. 1 Poenisbch, center Blk. 2, Sec. 32, Flowerbluff & Encinal farm, 8 miles S from Corpus Christi ..... T.D. 500 ft.; set surface csg.

Southwest Drlg. Co.'s No. 1 T. C. Ingram, 330 ft. from N and W lines of 80-ac. tract, Blk. 6, Sec. 7, of S. R. Peters Sur. ..... Moving in rig.

Texon Royalty Co.'s No. 1 E. McCoy, 330 ft. from W line, 3,830 ft. from S line, Sec. 3, of Palo Alto Sur., 6 miles SE from Agua Dulce ..... T.D. 800 ft.; set surface csg.

SAN PATRICIO COUNTY

George W. Scruggs' No. 1 Collins, 1,040 ft. from NE line, 700 ft. from SE line of Blk. 36, E. J. McGloin Sur. ..... T.D. 2,756 ft; changing to heavier rig.

STARR COUNTY

S.&B. Oil Co.'s No. 1 Crown Brick & Tile Co., 1,800 ft. S of State Highway No. 4 and 580 ft. from W line of Porcion 87, near La Puerta ..... T.D. 4,560 ft; fishing.

Great Plains Oil Co.'s No. 1 Sanchez, 660 ft. from W line, 330 ft. from S line of SE NW of Sur. No. 344 .. T.D. 2,350 ft.; standing.

Goodwin & Yantis' No. 1 Kelsey Bass, 150 ft. from S and E lines of Blk. 3, Coast O. & G. Subd. of Secs. 2 and 3, Porcions 86-87 ..... Rigging up for 3,500-ft. test.

Goodwin & Yantis' No. 1 Seabury, 150 ft. from S and W lines of Sec. 107, Share No. 1, Porcion No. 107.... T.D. 2,095 ft.; no report.

Goodwin and Yantis' No. 2 Walker, 3,000 ft. from S line, 2,000 ft. from W line of Sur. No. 767 ..... Steel derrick.

K. D. Harrison's No. 1 Garcia, 4,018 ft. from S line, 330 ft. from W line of Share 215, Porcion 90, jurisdiction Camargo ..... Spudded in; T.D. 40 ft.

Myers, Sullivan & Jenkins' No. 1 Starr County Cattle Co., 330 ft. from N line, 330 ft. from W line, Blk. 62, Porcion 89, Share 60 ..... Rigging up.

R. D. Perkins & Hoffman's No. 1 E. A. Peffler, 3,090 ft. from W line, 2,480 ft. from S line of Sur. 933.. T.D. 80 ft.; standing.

W. R. Shankle's No. 1 Garcia, 150 ft. from SW and NW lines of Blk. 33, Subd. N of Porcion No. 90.... T.D. 3,010 ft.; abnd.

TRAVIS COUNTY

Franklin et al's No. 1-A Reimers, 1,200 ft. from SE line, 1,600 ft. from most southerly SW line of Sur. No. 35 ..... T.D. 500 ft.; standing.

Watson, Johnson & Brady's No. 2 Brady ..... T.D. 1,312 ft.; drlg.

Weaver & Osborn's No. 1 Will Reinhardt, 300 ft. from NW line, 1,200 ft. from NE line of Will Reinhardt 100-ac. tract in William Lewis, Jr., Sur 2.... T.D. 248 ft.; standing.

UVALDE COUNTY

Evans & Thompson's No. 1 Farris, 400 ft. from S and W lines of 535-ac. tract near center of John J. Hammond Sur. .. .. T.D. 460 ft.; no report.

John Roberts' No. 2 Kincaid ..... T.D. 385 ft.; standing.

O. A. Payte, No. 1 H. M. Waldrip, 160 ft. from S and W lines of G. Traute Sur. No. 471 ..... T.D. 1,040 ft.; S.D. in lime.

WEBB COUNTY

E. B. Madden's No. 1 Bruni, 150 ft. from E line, 330 ft. from S line of 105-ac. tract in Sur. No. 2,241.... T.D. 2,298 ft.; drlg.

Edwin M. Jones' No. 2 Callaghan, 330 ft. from S and E lines of C.C.S.D.&R.G.N.G. R.R. Sur. No. 1,211... Dropped till work starts.

Merle Gunby's No. 1 A. M. Bruni, 1,252 ft. from W line, 328 ft. from S line of Sur. No. 857 ..... T.D. 1,308 ft.; drlg.

Will Ohlhausen's No. 1 Moses Jones, 273 varas from E line, 516 varas from S line of 100-ac. tract in Sur. No. 1,640 ..... T.D. 850 ft.; standing.

WILLIAMSON COUNTY

Alexander Drlg. Co.'s No. 1 J. & G. Kreig ..... T.D. 1,550 ft.; fishing.

Fritz Fuchs' No. 1 Zeischang ..... T.D. 1,075 ft.; standing; shot with dynamite; no increase.

McLean et al's No. 2 R. C. Miller, 300 ft. to S line, 100 ft. to W line of tract, B. Manlove Sur. ..... T.D. 2,265 ft.; standing.

Taylor Production Co.'s No. 1 Backmeyer, 283 ft. from N line, 396 ft. from E line of 38-ac. tract in White Sur. ..... T.D. 760 ft.; drlg.

Wilson, Worley & Moore's No. 1 Mrs. M. E. Olive ..... T.D. 41 ft.; S.D.

ZAPATA COUNTY

J. C. Charver's No. 1 Bustamente, 330 ft. from N and E lines of 24-ac. tract in Share 24 of Las Comitas grant ..... T.D. 1,242 ft.; drlg

Hamilton, Brower & Crow's No. 1 Slator, 2,111 ft. from SW line, 1,980 ft. from SE line of Blk. 1, Subd. of Slator ranch in J. V. Borrego grant ..... T.D. 1,069 ft; standing.

Circle W. Oil Co.'s No. 1 M. Garza est., 623 ft. from NW line and 699 ft. from SW line of Blk. 30, C. A. Douglas Subd. of Charco de la India grant ..... T.D. 1,084 ft.; drlg.

J. P. Doyle's No. 1 I. Ramirez, 150 ft. from NW and SW lines of Blk. 15, Share 1, Porcion 16 ..... Spudded in and S.D.

Sarah Poppas' No. 1 Juan V. Cueller, Jr., 150 ft. from NE and SE lines of Blk. 4, Sur. 2 of Poppas Subd. of Por. 34 ..... Standing.

A. C. Savey et al's No. 1 Flores, 150 ft. from NW line, 306 ft. from NE line of Blk. 3, Share 1 of P. A. Richer Subd. of Porcion No. 38 ..... T.D. 2,404 ft.; tested sand and little oil.

ZAVALA COUNTY

Zavala O. & G. Co.'s No. 1 Gates, 1,320 ft. from N line, 1,320 ft. from E line of Hooper & Wade Sur. No. 13..T.D. 6,054 ft; hole cleared; standing.

Southwest Texas Proven Areas

Week Ending September 30

CEDAR CREEK POOL—BASTROP COUNTY

Company, well, farm name, section and block— Remarks.

Marts & Beavens' No. 4 Reyes, 300 ft. SE of No. 3 and 825 varas from NW line, 1,330 varas from SW line of 233-ac. tract in Addison Lytton Sur. .....T.D. 1,750 ft.; abnd in Serpentine.

Joe Mills' No. 1 Noss, 400 ft. to E line, 150 ft. S of 78-ac. tract in Addison Litton Sur. .....T.D. 1,874 ft.; bailing sand 1,768-86 ft.; tested dry.

NORTH DALE POOL—BASTROP COUNTY

Chiquita Oil Co.'s No. 3 Harris, 600 ft. SW of No. 1 or 60 ft. from Bee Creek and 140 ft. from W line of 40-ac. tract in John Maxmillian Sur. .....T.D. 2,250 ft.; coring.

Marts & Beavens' No. 3 Riddle, 685 ft. from NW line, 2,075 ft. from SW line of John Maxmillian Sur. ....Bldg. derrick.

Marts & Beavens' No. 3-A Riddle, 200 ft. from NW line, 1,100 ft. from NE line of John Maxmillian Sur...T.D. 2,224 ft.; W.O.C.

Ogden & Reed's No. 1 Spradlin, 300 ft. from S line, 200 ft. from E line of 113-ac. tract in Grey Sur. ..Rigged up; standing.

TULETA POOL—BEE COUNTY

Conservative Oil Co.'s No. 1 Coutts, 165 ft. from W line, 150 ft. from N line of SW SW SW Sec. 2, Blk. 7, Ragsley Subd., Miller Chittam ranch, J. M. Uranga grant .....T.D. 4,323 ft.; resumed drlg.

ECKERT POOL—BEXAR COUNTY

F. H. Eckert & Co.'s No. 8 Louis Brehm, 550 ft. from W line, 150 ft. from S line of 93-ac. tract in P. L. Buquor Sur. .....T.D. 710 ft.; comp. 8 bbls.

Eckert & Son's No. 9 Brehm, 150 ft. from S line and 190 ft. from W line of 93-ac. tract in Buquor Sur. ..T.D. 550 ft.; drlg.

J. F. Harrison's No. 1 F. Gembler, 150 ft. from NW line, 460 ft. from NE line of 88-ac. tract in J. Montes Sur. .....T.D. 435 ft.; standing.

Swearingen Oil Co.'s No. 14 Halbardier, 700 ft. N of No. 3 on 93-ac. tract .....T.D. 650 ft; drlg.

Swearingen Oil Co.'s No. 15 Halbardier, 2,350 ft. from W line, 850 ft. from N line of Jose Maria y Perez Sur. .....Rigged up.

WEBSTER POOL—CALDWELL COUNTY

C. J. Webster Oil & Gas Co.'s No. 1 Fulps, 150 ft. from E line, 225 ft. from S line of tract in John A. Neill Sur. .....T.D. 2,351 ft.; working with crooked hole.

EAST COLE FIELD—DUVAL COUNTY

Cole Petroleum Co.'s No. 1 S. Benavides, 150 ft. from SW line, 347 ft. from SE line, Blk. 347, Myrtle E. Hill Subd., Mariana Arispe grant .....T.D. 2,400 ft.; drlg.

NORTH GOVERNMENT WELLS POOL—DUVAL COUNTY

Al Buchanan et al's No. 4 Ellison, 330 ft. from N and W lines of (40-ac.) NE of NW of Sur. No. 44 .....Location.

Central Producers, Inc.'s No. 7 Tuck & Johnson, 330 ft. from S and W lines of SE SW of Sur. No. 42 .....T.D. 500 ft.; drlg.

Rodney DeLange's No. 1 Lundell, 330 ft. from S line, 150 ft. from E line of SW of Sur. No. 60 .....Rigging up.

A. L. Edington's No. 2 Lundell, 200 ft. from N and E lines of S½ SE Sec. 48 .....T.D. 2,334 ft.; dry and abnd.

Hamil & Hamil's No. 6 Hahl, 330 ft. from N and E lines of N half of SE of Sur. No. 42 .....T.D. 700 ft.; drlg.

Hester Bros.' No. 1 fee, 330 ft. from S and E lines of NE of Sur. No. 47 .....T.D. 200 ft.; fooling around.

Highland Oil Co.'s No. 7 Lundvall, 330 ft. from N and E lines, J. Poetevant Sur. No. 42 .....T.D. 2,290 ft.; set csg.; W.O.C.

Humble Oil & Refining Co.'s No. 13 Hahl, 3,670 ft. from S line, 330 ft. from W line of E half of Sur. No. 360..T.D. 2,304 ft.; flowing; not gauged.

Humble Oil & Refining Co.'s No. 14 Hahl, 4,350 ft. from S line, 330 ft. from W line of E half of Sur. No. 360..T.D. 2,297 ft.; drlg. in.

Humble Oil & Refining Co.'s No. 15 Hahl, 330 ft. from N and W lines of E half of Sur. No. 360 .....Rigging up.

Navarro Oil Co.'s No. 18 Hahl, 330 ft. from N and E lines of W½ of Sur. No. 360 .....T.D. 2,311 ft.; comp. flowing 25 bbls. hrly.

Navarro Oil Co.'s No. 21 Hahl, 2,310 ft. from S line, 990 ft. from E line of W½ of Sur. No. 360 .....T.D. 2,275 ft.; comp. flowing 35 bbls. hrly.

Navarro Oil Co.'s No. 22 Hahl, 2,950 ft. from S line, 990 ft. from E line of W½ of Sur. No. 360 .....T.D. 2,277 ft.; comp. flowing 25 bbls. hrly.

Navarro Oil Co.'s No. 28 Hahl, 2,310 ft. from S line, 990 ft. from W line, W half of Sur. No. 360 .....Rigging up.

Navarro Oil Co.'s No. 29 Hahl, 2,970 ft. from S line, 990 ft. from W line, W half of Sur. No. 360 .....Rigging up.

Reynosa Oil Co.'s No. 4-A Duval County Ranch Co., 330 ft. from S line, 990 ft. from E line of N½ of SW¼ of Sur. No. 362 .....T.D. 2,100 ft.; drlg.

Reynosa Oil Co.'s No. 3-B Duval County Ranch Co., 990 ft. from N line, 330 ft. from E line of E½ of SE¼ of Sur. No. 363 .....Rigging up.

Reynosa Oil Co.'s No. 3-B Duval County Ranch Co., 990 ft. from N line, 330 ft. from E line of E½ of SE¼ of Sur. No. 363 .....T.D. 1,650 ft.; standing.

Reynosa Oil Corp.'s No. 5-A Duval Co. Ranch Co., 330 ft. from S and E lines of N half of SW of Sur. No. 363 .....Rigging up.

Russ Petroleum Co.'s No. 2-A Hahl, 330 ft. from N and E lines of NW SW, Sur. No. 48 .....Rigging up.

Smith & Storey's No. 5 Lundell, 150 ft. from N and E lines of S half SW of Sur. No. 48 .....Drlg. 2,157 ft.

Sun Oil Co.'s No. 5 Weiderkehr, 330 ft. from N and E lines of Sur. No. 361 .....Drlg. 2,301 ft.; comp. 25 bbls. hrly.

Sun Oil Co.'s No. 6 Weiderkehr, 660 ft. N of No. 4, Sur. No. 359 .....Rigging up.

SOUTH GOVERNMENT WELLS POOL—DUVAL COUNTY

Humble Oil & Refining Co.'s No. 11 Paul White, 1,310 ft. from E line, 1,000 ft. from S line of Sur. No. 249..Rigging up.

NORTH KOHLER FIELD—DUVAL COUNTY

O. W. Killam's No. 1 Akin, 165 ft. from N and W lines of W half SW of Sur. No. 184 .....T.D. 2,691 ft.; abnd.

SARNOSA POOL—DUVAL COUNTY

L. W. Capps' No. 6-A Duval County Ranch Co., 330 ft. from SW line, 1,380 ft. from NW line of W¼ of Sur. No. 574 .....Rigged up and standing.

Magnolia Pet. Co.'s No. 4 Ruiz, 330 ft. from NW line, 860 ft. from SW line of S½ of Sur. No. 574 .....T.D. 2,419 ft.; comp. 100 bbls. dly

Navarro's No. 9 Hahl, 1,650 ft. from N line, 330 ft. from W line of W½ of Sur. No. 360 .....T.D. 2,259 ft.; W.O.C.

Violet Oil Co.'s No. 1, 330 ft. from NW line, 525 ft. from SW line of N half of Sur. No. 127 .....Rigging up.

PALANGANO POOL—DUVAL COUNTY

Southern Alkali Corp.'s No. 3 Mrs. Jane Schallert, 2,-600 ft. from S line, 2,250 ft. from E line of Sur. No. 81 .....Spudded in.

PIEDRAS PINTAS POOL—DUVAL COUNTY

Kelley et al's No. 1 C. S. Tinney, 1,100 ft. from N line, 200 ft. from E line of Sur. No. 8 .....T.D. 240 ft.; drlg.

CHITTIM POOL—MAVERICK COUNTY

Rycade Oil Corp. et al's No. 2 Chittim, 1,520 ft. from N line, 350 ft. from W line of Sec. 157, I.&G.N.R.R. Sur., Blk. 7 .....T.D. 200 ft.; S.D.

JACOB POOL—McMULLEN COUNTY

Loma Oil Co.'s No. 17-A Jacob, 304 ft. from W line, 1,410 ft. from S line of G.H.&H. Sur. No. 7 .....Spudded in.

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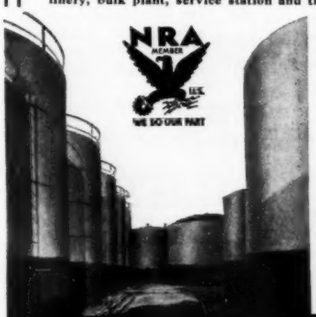

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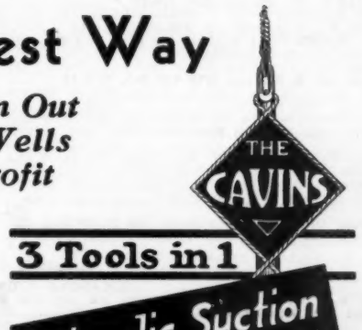

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THE CAVINS COMPANY
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Longhorn Oil Co.'s No. 3-A Lark, 450 ft. from N line, 150 ft. from W line of Blk. 14, of Subd. of Lark land in E. W. B. Scrugham Sur. ..... T.D. 1,008 ft.; set csg.
Kennon & Stephenson's No. 1 Lark, 150 ft. from N and W lines of Blk. 15, subd. of Lark land in E. W. B. Scrugham Sur. ..... T.D. 1,033 ft.; set csg.; W.O.C.
J. S. Suttle's No. 1 Lark, 150 ft. from N and W lines of Blk. 16, in E. W. B. Scrugham Sur. ..... T.D. 1,048 ft.; running tubing; est. 30 bbls. daily.

AGUA DULCE FIELD—NUECES COUNTY

H. F. Grimm's No. 1 Bluntzer, 300 ft. from W line, 2,100 ft. from S line of 639-ac. tract in Elliff Sur. .. Location.

CUEVITAS POOL—STARR COUNTY

Sun Oil Co.'s No. 3-A Guerra, 5,940 ft. from NW line, 1,000 ft. from SW line of Share 14-B in Las Cuevitas grant ..... T.D. 2,650 ft.; S.D.
Sun Oil Co.'s No. 4-A Guerra, 3,300 ft. from NW and SW lines of 1,360-ac. tract in Las Cuevitas grant ... T.D. 2,265 ft.; in sand 2,253-65 ft.; set csg.
Sun Oil Co.'s No. 5-A Guerra, 3,364 ft. from SW line, 6,595 ft. from SE of Share H-14-B of Las Cuevitas grant ..... Rigging up.

LOS OLMOS POOL—STARR COUNTY

Tarver and Nance's No. 8-A Kelsey Bass, 150 ft. from N line, 160 ft. from W line of SW SE Sec. 6, Porcions 75, 76, 77, Jurisdiction of Camargo ..... T.D. 448 ft.; set csg.; W.O.C.

LAUREL FIELD—WEBB COUNTY

Montex Oil Co.'s No. 1 C. O. Haines, 150 ft. from S and E lines of Sur. 224 ..... T.D. 900 ft.; drlg.

MOCA POOL—WEBB COUNTY

Moca Oil Co.'s No. 7 Duval County Ranch Co., 285 ft. from W line, 1,825 ft. from N line of Blk. 22, Share 3 of Zapata County School Land Sur. ..... T.D. 871 ft.; coring.

ESCOBAS POOL—ZAPATA COUNTY

S. R. & C. Oil Corp.'s No. 2-C Trevino, 330 ft. from S line, 330 ft. from W line of N½ of Blk. 13, in Sur. No. 412 ..... Location.
Texas Co.'s No. 42 Whitehead ..... T.D. 405 ft.; drlg.

JENNINGS POOL—ZAPATA COUNTY

United Prod. Corp.'s No. 11 Measles, 3,483 ft. from NW line, 16,500 ft. from SW line of Cerrito Blanco grant ..... T.D. 3,175 ft.; drlg.

Wildcat Operations in Louisiana-Arkansas

(Continued from Page 43)

N. B. Porter's No. 1 J. W. Porter Est., 330 ft. N and E, SW cor. SE SE Sec. 23-12-13 ..... Tested dry and S.D.; T.D. 1,204 ft.
D. H. Sebastian, Jr.'s No. 1 W. H. Hill et al, 200 ft. S and E, C Sec. 3-10-13 ..... Derrick.

GRANT PARISH

L. L. Lindsey et al's No. 1 Edenborn, 250 ft. E, 150 ft. N, SW cor. SE SE Sec. 13-7-4 ..... Began drlg. Sept. 30; 12½-in. 40 ft.

SABINE PARISH

A. F. Allen's No. 1 G. W. Belton, NE cor. NW NW Sec. 32-9-13 ..... S.D. fuel 400 ft.
Frank R. [illegible] ..... Drlg. 800 ft.

CONVERSE DISTRICT

Arrock Oil Co.'s No. 1 Hewitt, 330 ft. N and E, SW cor. NE SE Sec. 20-9-13 ..... Rig up.
A. G. Craig's No. 1 Belton, 330 ft. N and E, SW cor. NW NW Sec. 32-9-13 ..... Derrick.
Helena O. & G. Co.'s No. 1 E. K. Harris, 990 ft. S and W, C Sec. 10-9-13 ..... Derrick.
Mamie S. Hammond's No. 1 Patrick, 330 ft. N, 3,310 ft. W, SE cor. Sec. 1-9-13 ..... T.A. 3,235 ft.
H. C. Lesinger's No. 1 Bowman-Hicks Lbr. Co., 338 ft. S and E, NW cor. SW Sec. 13-9-13 ..... Drlg. 3,225 ft.
C. L. Nixon's No. 1 Patrick, 330 ft. S and E, NW cor. NE SW Sec. 21-9-13 ..... W.O.S.R. 1,600 ft.
Sabine Royalties Co.'s No. 1 Baiew & Carter, 330 ft. N and E, SW cor. NW SW Sec. 21-9-13 ..... Tested dry; W.O. 2,008 ft.
J. E. Seabury's No. 1 E. K. Harris, 990 ft. W, 330 ft. S, C Sec. 10-9-13 ..... Derrick.
Wm. Stewart et al's No. 1 Latham, 330 ft. N and E, SW cor. NW NE Sec. 22-9-13 ..... Began drlg. Sept. 25; cmtd. 10-in. 64 ft.
Homer Tyson's No. 1 G. W. Hough, 330 ft. S and E, NW cor. SW NW Sec. 31-9-13 ..... Set 12-in. 40 ft.
Windsor O. & G. Co.'s No. 1 Barr, 330 ft. E, 990 ft. N, SW cor. NW Sec. 15-9-13 ..... Dry; S.O.; arranging use acid; T.D. 1,950 ft.
Windsor Oil Co.'s No. 2 Barr, 330 ft. N and E, SW cor. NW Sec. 15-9-13 ..... Location.

Arkansas

ARKANSAS COUNTY

Allen & Wright's No. 1 C. P. Trice, SE cor. NW SW SE Sec. 9-2s-3w ..... S.D. 50 ft.

COLUMBIA COUNTY

C. W. Alworth et al's No. 1 W. D. King, SW cor. SE SW Sec. 16-17-20 ..... S.D. 1,864 ft.

JEFFERSON COUNTY

J. E. Elliott's No. 1 B. V. Nevin, 440 ft. N and E, SW cor. SW NW Sec. 26-4-10 ..... Derrick.
R. V. Harrell et al's No. 1 McGoughey, NW cor. Sec. 32-7-10 ..... S.D. 1,559 ft.

HEMPSTEAD COUNTY

Kentucky O. & G. Co.'s No. 1 Leslie, NW cor. SW NW Sec. 21-9-26 ..... Derrick.

LAFAYETTE COUNTY

Geo. W. Harper's No. 1 Reed-Bodcaw, NW cor. Sec. 16-15-22 ..... S.D. 2,417 ft.; C.D.

LONOKE COUNTY

Joe D. Strahan's No. 1 Hardin, 300 ft. S and E, NW cor. NW NW Sec. 18-2s-7 ..... Rig up.

MILLER COUNTY

Duluth-Ark. Oil Co.'s No. 2 Beck, 330 ft. S and E, NW cor. SE SW Sec. 24-15-26 ..... Coring red beds 2,796 ft.
Claude English et al's (was Tarkington et al's) No. 1 Gibson, 1,980 ft. N, 660 ft. E, SW cor. Sec. 30-18-27. S.D. 300 ft.

OUACHITA COUNTY

T. D. Reynolds' No. 1 Snow Hill Baptist Church, 525 ft. E, 115 ft. S, NW cor. SE SW Sec. 28-15-15 .... Set 6-in. 1,960 ft.; T.D. 1,969 ft.

POINSETT COUNTY

Ark. State O. & G. Co.'s No. 1 fee, C NE NE Sec. 13-11-3e ..... Derrick.

NEVADA COUNTY

Longoria et al's No. 1 Dick Gulley heirs, Sec. 2-13-20 .... S.D. 85 ft.

UNION COUNTY

Chas. Steele's No. 1 J. B. Combs, 150 ft. N, 185 ft. W, SE cor. SW NW Sec. 25-18-16 ..... Derrick.

WOODRUFF COUNTY

John Wadkins' No. 1 Rosser, Sec. 7-8n-2w ..... Began drlg. Sept. 2; cmtd. 10-in. 40 ft.; S.D. 1,300 ft.

Mississippi

JONES COUNTY

Snow-Black Pet. Co.'s No. 1 Watson, 600 ft. W, 210 ft. S, center, Sec. 24-7-13 ..... Drlg. Wilcox 4,127 ft.

LAMAR COUNTY

Lamar Oil Co.'s No. 1 Scott, NE NE Sec. 18-3n-14 ..... Arranging to set 5 3/16-in. 3,010 ft.

MADISON COUNTY

H. A. Wilson,tr.'s No. 1 Copex, 200 ft. N and E, SW cor. SW NE Sec. 24-9-2e ..... Drlg. 1,185 ft.

NEWTON COUNTY

Bob Dalton et al's No. 2 Majura, SE SE Sec. 25-6-11 .. Drlg. sandy shale 2,000 ft.

RANKIN COUNTY

Hill Bros. and Cleve Love's No. 1 Lancaster, C SW NW Sec. 27-5-5e ..... Derrick.

WALTHALL COUNTY

Mutual O. & G. Co.'s No. 1 Boyd, Sec. 24-2n-9e, SW cor. SW SE ..... Derrick pattern.

WARREN COUNTY

Orbet Drlg. Co.'s No. 1 R. L. Parker, 300 ft. E, CWL, Sec. 14-14-1e ..... Rig up.

Louisiana-Arkansas Proven Areas

North Louisiana

BOSSIER PARISH

Company, well, farm name, section and block—	Remarks:
Unit [illegible]as Public Service Co.'s No. 31 Skannel, Sec. 14-17-12	O.W.D.D.; rig up; old T.D. 877 ft.

CADDO—BETHANY

Tom Collins Pet. Co.'s No. 1 Gill & Lipscomb, 660 ft. N, 1,568 ft. E, SW cor. Sec. 17-16-15 ..... Derrick.

CADDO PARISH—BETHANY

Caister O. & G. Co.'s No. 1 Taylor, SW SE Sec. 34-17-16. Began drlg. Sept. 23; 10-in. 251 ft.
Dillingham et al's No. 1 Eady est., 660 ft. S and W, NE cor. SE NE Sec. 33-16-16 ..... Derrick.

CADDO—HOSSTON

C. D. Whittaker et al's No. 2 Barker, 1,150 ft. N, 1,900 ft. E, SW cor. Sec. 21-22-15 ..... Rig up.

CADDO—RODESSA

Ark. La. P. L. Co.'s No. 1 Williams & Windham, Sec. 4-22-16, 560 ft. S, 660 ft. E, NW cor., NE NW .... S.D. lime 6,509 ft.
United Gas Public Service Co.'s No. 1 Pestervan, Sec. 23-23-16, 1,980 ft. N, 1,320 ft. E, SW cor. ..... Coring lime and shale 5,710 ft.

DE SOTO PARISH

Tom McKinney et al's No. 1 J. M. Nabors, 330 ft. N and E, SW cor. SE SE Sec. 26-12-12 ..... Rig up.

OUACHITA PARISH

Century Carbon Co.'s No. 3 Stoughter, 1,980 ft. E, C Sec. 24-19-4 ..... Cmtd. 6-in. 2,161 ft.

RED RIVER PARISH

E. M. Thompson's No. 1 T. J. Crichton, SW SE Sec. 17-13-16 ..... S.D.; W.O. 1,740 ft.

RICHLAND PARISH

J. C. Prine's No. 1 Boughton, 1,360 ft. N, 1,920 ft. W, C Sec. 4-15-6 ..... Began drlg. Sept. 11; 12½-in. 110 ft.; 8-in. 850 ft.; drlg. 1,445 ft.
United Carbon Co.'s No. 1 J. A. Noe, 1,320 ft. S, 660 ft. E, C Sec. 14-17-5 ..... Began drlg. Aug. 15; 12-in. 190 ft.; 8-in. 790 ft.; 6-in. 2,285 ft.

SABINE PARISH—ZWOLLE

D. D. Alexander's No. 2 Cooper, 660 ft. S, 330 ft. W, NE cor. NW NE Sec. 31-8-11 ..... W.O.S.R. 2,343 ft.
Baird Bros.' No. 1 Trammell, 600 ft. N, 330 ft. W, SE cor. NE Sec. 30-8-11 ..... W.O.S.R. 2,606 ft.
Baird & Reed's No. 1 Dew, 330 ft. N, 210 ft. E, SW cor. SW SE Sec. 22-8-11 ..... Began drlg. Sept. 22; 10-in. 40 ft.; drlg. 300 ft.
J. C. Chandler's No. 1 Rains, SW cor. NW Sec. 14-7-11. Drlg. 2,000 ft.
Dyer et al's No. 1 McCollister, 330 ft. S and E, NW cor. SW NE Sec. 24-7-12 ..... Derrick.
P. A. Flannery's No. 1 Stille, 620 ft. W, 205 ft. N, SE cor. NE SW Sec. 35-8-13 ..... S.D. 1,910 ft.
Investors Prod. Co.'s No. 1 S. J. Williams, 600 ft. E and S, NW cor. Sec. 24-7-11 ..... Arranging cut csg. 2,300 ft.; T.D. 2,805 ft.
T. E. Kelly's No. 1 McClanahan, 1,000 ft. S, 330 ft. E, NW cor. SW NW Sec. 36-8-11 ..... Cmtd. 6-in. top marl 2,342 ft.
Lowery & Green's No. 1 Adair, 330 ft. N and W, SE cor. SE SW Sec. 19-8-11 ..... S.D.; W.O. 2,500 ft.
Magnolia Pet. Co.'s No. 2 J. M. Cook, 330 ft. S, 320 ft. W, NE cor. NE SW Sec. 30-8-11 ..... Arranging pump; T.D. 2,582 ft.
Pelican Nat. Gas Co.'s No. 21 La. Long Leaf Lbr. Co., 660 ft. N, 568 ft. W, SE cor. SE SW Sec. 3-7-11.... Dry; W.O. 2,700 ft.
Pelican Nat. Gas Co.'s No. 22 La. Long Leaf Lbr. Co., 330 ft. S and E, NW cor. SW NE Sec. 3-7-11..... W.O.S.R. 2,596 ft.
Pelican Nat. Gas Co.'s No. 24 La. Long Leaf Lbr. Co., 330 ft. N and E, SW cor. Sec. 5-7-11 ..... Bailed dry; W.O. 2,750 ft.
H. C. Pitts' No. 1 Trammell 330 ft. N and E, SW cor. NW NE Sec. 5-7-11 ..... Derrick.
Pugh-Hickman Drlg. Co.'s No. 9 Stille, Sec. 16-7-11, 330 ft. S and E, NW cor. SE NW ..... Began drlg. Sept. 13; 10-in. 60 ft.; S.D. 2,330 ft.
People's O. & G. Co.'s No. 1 Raines, 330 ft. N, 100 ft. W, SE cor. NE Sec. 15-7-11 ..... Set 10-in. 45 ft.
H. Reeves et al's No. 1 Ponder, 330 ft. N and W, SE NW Sec. 15-7-11 ..... W.O. 2,675 ft.
Rig Oil Co.'s No. 1 Walden, 330 ft. N and E, SW cor. NW NE Sec. 23-8-11 ..... Derrick
C. T. Ruffin's No. 1 McNeely, 510 ft. S, 330 ft. W, NE cor. NE NE Sec. 7-7-11 ..... Began drlg. Sept. 22; cmtd. 10-in. 97 ft.
L. J. Tillery's No. 1 Sabine Lbr. Co., 800 ft. S, 220 ft. W, NE cor. Lot 3, La. Nava grant, Sec. 5-7-11..... Derrick.
C. H. Tuttle's No. 4 Byrd, 800 ft. S, 920 ft. E, NW cor. NW NW Sec. 7-7-10 ..... Derrick

Arkansas

UNION COUNTY—URBANA

E. R. Henderson's No. 1 J. A. Patterson, 300 ft. N and W, SE cor. SE NW Sec. 19-18-14 ..... Began drlg. Sept. 20; 12½-in. 109 ft.; fishing for bit; T.D. 1,265 ft.
Wilson & Chapman's No. 1-B Hadley, Sec. 3-18-13..... S.D.; W.O. 3,615 ft.

Mississippi

HINDS COUNTY

Hensley & Tanner's No. 1 Hudson, 1,300 ft. N, 1,500 ft. W, SE cor. Sec. 11-5-1e ..... Began drlg. Sept. 20; cmtd. 10-in. 735 ft.; drlg. 1,400 ft.
Love & Lancaster's No. 2 Elton plantation, NE Sec. 9-4-1e ..... Derrick.
Meredith Trading Co.'s No. 1 Nelson et al, 630 ft. E, 330 ft. S, NW cor. SW SE Sec. 24-6-1e ..... Derrick.
United Gas Public Service Co.'s No. 1-C McLaurin, Sec. 19-6-2e, C SE ..... Top black shale 2,496 ft.; drlg. 2,566 ft.

RANKIN COUNTY

Ferguson, Fuller & Metz' No. 1 Ammons, 350 ft. E and S, NW cor. NW NW Sec. 35-3n-3e ..... Rigging up.
Love Pet. Co.'s No. 2 fee, Sec. 31-6-2e, 835 ft. N, 25 ft. E of SW cor. ..... Cmtd. 10-in. 719 ft.
Cleve Love et al's No. 1 Thomas, SW Sec. 10-4-1e..... Derrick.
Muse & Muse's No. 1 Carlton, Sec. 13-5n-1e, 650 ft. E, 725 ft. N, SW cor. ..... Cmtd. 6-in. 3,407 ft.

EAST TEXAS (Border Counties)

MARION COUNTY

Perry et al's No. 1 E. B. Colgin, 300 ft. N and E, SW cor. Martin Noll Sur. ..... Set 10-in. 50 ft.; S.D. 1,400 ft.

PANOLA COUNTY

W. H. Nichols et al's No. 1 S. W. Ray, 330 ft. S of N line, 330 ft. W of E line, W. P. Culver Sur. ..... Set 10-in. 102 ft.
M. H. Robbins et al's No. 1 Alsee Williams, 165 ft. N and E, SW cor. 30-ac. tract in Winnie Mann Sur . Rigging up.
C. R. Obermeyer et al's No. 1 T. J. Wooten, P. Martin Sur. ..... Began drlg. Sept. 16.

FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing or transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depth of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

Terpene of Gulf Coast Subject of Interesting Discussion

Does the presence of what is commonly called "terpene" in a well producing gas indicate that there might be oil in that vicinity? In other words, does terpene have any relation to crude oil, or is it a derivative of natural gas, or is it an entirely separate factor? There are a number of gas wells along the Gulf Coast which have produced terpene in small quantities, especially in the Saxet, Refugio and Edna gas fields, and two of these fields have later produced oil from a different horizon.—M. J. B.

The American Association of Petroleum Geologists' bulletin for April, 1932, contains an interesting discussion of terpene by Dr. W. Armstrong Price. Doctor Price's article, "Disseminated Oil of Corpus Christi Area," reports the appearance of an oily substance on water obtained for domestic use from water wells in this area. Quoting from it:

"The writer has previously noticed the occurrence with natural gas and oil in the Gulf Coast region of light condensate commonly called terpene. The earlier chemical work of Gulf Coast terpene samples seems to have been inconclusive as to the composition of the oil. Physically, it has the properties of a high test kerosene from asphalt-base petroleum.

"The gravity ranges, in four samples determined, from 26.4° to 34.3° Be. at 60° F., or from 0.8535 to 0.8961 specific gravity. The odor of the samples in an extensive series examined ranges from that of turpentine to a cedar odor. Terpene seems to be characteristic of the Gulf Coast Tertiary oils, being more prominent, by odor, in the shallower oils, but occurring with many grades of oil at different depths.

"One occurrence in a Texas Cretaceous oil has been reported. Its composition is probably variable. At least two hydrocarbon series have been reported as occurring in it. It imparts the characteristic odor to the Gulf Coast natural gas of the Oakville and Catahoula sands, and of shallower formations. In many gas sands no other oil is present and the terpene condenses from a gaseous state when the temperature is suddenly reduced, as by expansion in separators designed to remove water and terpene from the gas.

"The terpene is not known in gas to larger amounts than approximately 1 bbl. per 1,000,000 feet. It does not commonly occur in noticeable amount in all gas wells of the area. An ordinary amount in the Corpus Christi area is 1 gallon of terpene per 1,000,000 feet. A typical occurrence at Saxet ranges from 15 to 100 parts per 1,000,000 relative to salt water made by the well.

"The only oil known to the writer to occur in the immediate coastal belt with the natural gas from the formations above the Oakville and Catahoula is this so-called terpene. Gasoline and petroleum constituents other than terpene have not been reported at depths less than 3,000 feet, although some of the reported showings of dark oil at shallow depths may contain fractions other than terpene. The assumption is that the minute globules in the Lissie and Beaumont are probably terpene.

"With this interpretation, terpene may be described as a light, volatile, aromatic oil occurring with petroleum and natural gas, to which it imparts an odor of turpentine or cedar It ranges from 0.8535 to 0.8961 in specific gravity and from 26.4 to 34.5° Be. gravity at 60° F. Its color ranges from pale straw-yellow, through deep cherry-red to dark green. The darker shades may be due to admixture with other crude oils. Its film may range from brittle to waxy, colorless to red, but always iridescent except when only the wax remains. It seems to be found without associated oils in the shallow water and gas sands of the Gulf Coast of Texas and Louisiana. It occurs in large amounts with some of the shallow, cap-rock oils on salt domes, as at Humble and on several Louisiana coastal domes. It is also present, probably in relatively smaller percentages, in many of the deep oils of the Tertiary, and has been reported from a Pennsylvanian limestone. It is probably related to the terpenes of Europe and Asia, but the composition of the various terpenes, if fully known to chemists, is not yet published, so far as the writer is aware.

"The data, although admittedly scanty in regard to important factors, suggests that vertical migration of oil into the Beaumont and Lissie sands of the Corpus Christi area has not occurred uniformly throughout the area, but that it has been the cause for commercial pools of oil in the same beds in the Houston district. A local origin for the minute oil globules in the Corpus Christi area is suggested by the information now available. By the term local origin is meant an origin in the water-sand group, or in the immediately adjacent beds. It is plainly recognized, however, that the whole phenomenon may be merely an indication of upward migration of small amounts of natural gas bearing terpene."

Geological Report Dealing With Beckham County, Oklahoma

Can you tell me where I can obtain geological reports covering the whole of Beckham County, Oklahoma?—W. M.

Geological reports on Beckham County, Oklahoma, are contained in "Geology of Beckham County, Oklahoma," Oklahoma Geological Survey Bulletin 40-M. 1927, by Frank Gouin, and in "Geology of Southwestern Oklahoma and Anadarko Basin," by Becker, Wells and Fulton, The Oil and Gas Journal, September 8, 1932. Although the Oklahoma Geological Survey is conducted no longer by the state and no new work is being done, copies of reports of surveys made before this department was abandoned may be obtained by addressing a communication to the Oklahoma Geological Survey at Norman, Okla. A small charge will be made for the Beckham County report.

Macksburg Sand Believed to Be Unsuited to Acid Treatment

Have you any information as to the efect of acid treatment on old wells in the 800-foot or Macksburg sand in Ohio? If so, what is used? How is it applied and how absorbed? —W. E. M.

Available information relative to the Macksburg sand indicates it is the equivalent of the Freeport sandstone of the Appalachian geosyncline province. Being a sandstone it presumably is not susceptible to acid treatment. Acid treatment consists essentially of dissolving portions of a lime formation and releasing entrapped oil and gas into the bottom of the well. As sandstones are made up of grains of silica sand, and silica is not soluble in normal acids, it is assumed that no one has successfully treated old wells in the 800-foot Macksburg sand in Ohio with acid.

Because of the fact that treatment of any well in either limestone or sand is a special problem it is suggested that you get the services of an expert to undertake the work. Just pouring acid into a well is not productive of good results and in many instances it has done more harm than good.

Properties of Crude as They Are Affected by Dissolved Gas

In your reply to a question in The Oil and Gas Journal of September 7, 1933, signed "O. U. R.," you referred to the beneficial effects of dissolved gas in the crude oils of various fields, but you said little about what these beneficial effects were. I would like to ask for information concerning any favorable influences gas in solution may have on the properties of crude oil.—N. A. O.

Of the properties of the oil which might be affected by dissolved gas, one of the most important from the point of view of production is surface tension, according to William N. Lacey, of the California Institute of Technology, to whom this department is indebted for the information here given in reply to your question.

High surface tension causes more difficulty in pushing oil out of small capillary spaces between sand grains and presumably in obtaining complete drainage. A decrease in surface tension would be an aid therefore to increasing ultimate production. That the dissolving of gas—even a dry gas—has a marked effect upon surface tension has been demonstrated. The surface tension at a saturation pressure of 2,000 pounds per square inch is only about one-third of that of the oil at atmospheric pressure.

A corresponding advantage is found with respect to viscosity. Lowering of viscosity means an increase in the mobility of the oil and therefore greater ease in pushing the oil through a porous sand body to the well. After the oil has been saturated with dry gas at 2,500 pounds per square inch its viscosity decreases to one-fourth of its original value. This represents a great advantage with respect to rate of flow through sands and with respect to ultimate drainage.

The petroleum engineer is interested also in knowing what effect the dissolved gas will have upon the volume of oil produced. An increase of more than 20 per cent in volume was recorded on saturating Santa Fe Springs oil with Santa Fe Springs dry gas at 100° F. and 2,400 pounds pressure per square inch. This marked increase in volume of the oil, saturated at a pressure such as exists in the formation as compared to oil at atmospheric pressure in the storage tank, has an important bearing upon the calculation of oil reserves underground.

The same oil-gas combination subjected to similar pressure and temperature recorded a rise in A.P.I. gravity from 33° to 57°. The Santa Fe Springs gas used for these experiments consisted of approximately 87 per cent methane, 8 per cent ethane and 5 per cent propane.

Why Was It Called That?

HORSEBACK OPINION

The expression "horseback opinion," which has been coming into widened use in the oil industry, refers to an offhand answer, an estimate (as of a well's productivity or of a gas field's reserves, for example) quickly formulated upon whatever information happens to be available. It is said to have been borrowed from the lumber industry. When a timber expert surveys a forest to estimate the quantity of standing timber, he commonly rides among the trees on horseback. He dismounts from time to time, calculates the average number of trees in a certain area, estimates the average feet to a tree and thus arrives at a fairly accurate total.

TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible.

Inquiries must be signed but only the given initials will be printed. The source of the questions is considered to be confidential.

Questions requiring a discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered.

When the matter is of general interest the reply will be published within a reasonable time.

Testing Method For Gum in Gasoline and Allowable Gum

What is the test most generally used for gum determination and what is the generally accepted maximum allowable gum? Would the gum from a cracked gasoline by the copper dish method be interpreted as preformed or potential? Has this test any value now? Where could one obtain information on the best methods for treating cracked gasolines and prevention of the formation of gum?—D. H. M.

So far as my observation and information goes, I should say that the copper dish method for gum continues to be used for determining gum in gasoline. The practice is to make enough analyses by one of the more accurate methods often enough to permit correlation and interpretation of the results by the copper dish method. It should be noted that the objection to gum determinations made in the copper dish is that they do not check and that some potential gum is liable to be produced under the conditions of the test. The method may be useful as a control test but is not acceptable under referee conditions. The contracts met with in the trade seldom permit gasoline to be furnished containing more than 50 mgm. of gum, as found by the copper dish method. When gum is to be specified in a contract it is advisable to also specify the method. No method for determining gum in gasoline has been standardized. The report of committee D-2 of the American Society for Testing Materials, for the year 1932, contains a report on the subject, page 15. The material following is abstracted from this reference.

Practically all proposed methods for determining gum involve evaporation of the gasoline so as to prevent further oxidation. The steam-oven method of Cooke, U. S. Bureau of Mines, Serial 2,686, 1925, excludes air by evaporation in a closed oven through which steam is passed.

Quite recently the General Motors Laboratory has developed a high-temperature air-jet method in which the dish is placed on a bath of boiling ethylene glycol. (Glass or porcelain dish.)

The steam-oven method has in most laboratories been used at temperatures above 100° C. and tests were initially run at 163° and 120° C.; the lower temperature giving high results. The steam-oven method at 163° C. appeared to give results about one-half of those by the air-jet method.

Investigations suggest that the quantity of residual gum from an aged gasoline depends upon the conditions of evaporation. A study of the 100° C. air-jet method includes temperature, drying time, volume of gasoline and weighing errors. A drying period of one hour at 155° C. was approved, while 50 ml. sample was chosen.

The authorities vary as to the quantity of permissible gum. Some set the tolerance at 10 mgm., others believe that 50 mgm. per 100 ml. may not be harmful.

Two proposed methods are given in this publication on pages 20 and 21. Method "A" requires the use of a glass dish in which a 50 ml. sample is evaporated on a steam bath under an air-jet. The dish is dried, after evaporation for one hour at 300° to 310° F. Method "B" provides that 50 ml. of the gasoline shall be evaporated from a beaker in a special bath under an air jet. The beaker is cooled for one hour in a desiccator. The results are preformed gum.

The gum from a cracked gasoline by the copper dish test would include some potential gum and sulphur. The test has no value as a referee method.

Treating methods are well covered in Chemical Refining of Petroleum, by Kalichwsky and Stagner.

Q Brand Permits Modified Use of Ethyl Lead

It is reported that some companies are using a certain Q fluid as an antiknock substance and as I am wholly ignorant in the matter would greatly appreciate your explanation as to what this Q fluid is.—C. A. W.

The Ethyl Gasoline Corp. early in 1933 announced that their tetraethyl lead solution was to be made available to those marketers and refiners who held contracts for the sale of Ethyl Gasoline, to use the lead solution for the purpose of bringing up their second grade gasolines to an antiknock rating equivalent to 70 octane number. This is the same fluid that had been formerly limited to making Ethyl Gasoline. The new grade went on sale June 1, 1933.

The agreements in the Q contract set forth that the lead fluid shall be used, under the conditions, only in what the trade may term the ordinary grade of gasoline, selling next below the price of Ethyl Gasoline. It was agreed that the compound was to cost 35/100 cents per cubic centimeter and that a royalty of 5/100 cents was to be paid per gallon. The lead solution could not exceed 1.5 c.c. per gallon, and must not be less than 0.3 c.c. to the gallon. It was estimated that the cost to the refiner was to range between 155/1000 and 565/1000 cents per gallon of the completely blended motor fuel.

Investigation made under Mid-Continent conditions suggested that the average blend of straightrun and cracked gasoline, with a small quantity of natural gasoline, and indicating an octane number of 62, could upon the addition of 1.5 c.c. of the lead compound be brought up to 70 octane value. This was set as the limit for the Q brand, and has the advantage that the purchaser will always be certain about this rating of the fuel; and it is higher than the average of the regular gasolines sold in the Mid-Continent area.

The maximum permissible quantities of sulphur, volatility, and gum are similar to those required for the Ethyl Gasoline. The motor fuel may be colored when placed on sale, no special shade being specified except that red cannot be used, that color being reserved for Ethyl Gasoline.

Funk Sludge Test Method For Turbine Oil

We are desirous of learning the nature and method of the Funk Sludge Test for Turbine oil.—I. A. C.

The Funk sludge test was developed, under the supervision of Harold Farmer, in the laboratories of the Philadelphia Electric Co. for the investigation of turbine oils with respect to resistance to emulsification and oxidation.

The first published information regarding the development of the Funk test appeared in the lubrication report of the prime movers committee of the National Electric Light Association in 1924, Publication No. 24-77. The 1926 report of Committee D-2, American Society for Testing Materials, refers to the Funk sludge accelerator test and gives some directions for running the test. (Report of Subcommittee 11 on Turbine Oil.)

The apparatus consists fundamentally of a rectangular covered steel tank (18"x 10"x14" deep) in which baffles are placed to lengthen the path of the oil. The tank is charged with 8 gallons of oil. The oil is drawn from the last compartment and forced into the first by means of a small motor-operated pump. Ten per cent of distilled water is placed in the tank with the oil and air is blown through the oil at the rate of 40 liters per hour. The tank and its contents are maintained at 205° F. The duration of test is generally 50 hours. Samples are drawn from the apparatus every five hours and centrifuged; the amount of "combined sludge and emulsion" is recorded and the neutralization number of the oil determined.

The apparatus has been known by several names: Funk oil sludging machine, Funk sludge accelerator. The apparatus was first called a sludge machine because of the common terminology applied to the deposits formed in turbine reservoirs. It is felt, however, that this is a misnomer since the turbine deposits and the deposits developed in the Funk machine consist chiefly of actual sludge (oxidized oil). A more appropriate name for the apparatus is "Funk turbine oil tester." The term used for the deposits measured by the centrifuge is "sludge and emulsion."

Extensive field tests and laboratory tests indicate that 50 hours run in the Funk apparatus corresponds to about 5,000 hours in actual turbine service operation.

It should be clearly understood that the test attempts to measure only the tendency of turbine oil to develop emulsions and oxidized material when such oils are used in horizontal steam-driven turbines.

The Funk test is employed by a number of large electric utility companies for the investigation of turbine oils and for periodic checking of shipments of turbine oil.

Relation of Temperature to Knock In Gasoline Motor

Do you have any data relating to the influence of variable temperatures on the intensity of the combustion knock that forms when gasoline is the fuel burned in an engine? Is it not true that at some relatively high temperature the knock tends to disappear?—A. E. R.

There has been a great deal of work done covering the conditions surrounding the combustion of gasoline in the internal combustion engine and several investigators have studied the temperatures. It may be that the following will serve your purpose.

It has been shown by the excellent work of Dumanois and associates, as reported at various times before the French Academie des Sciences, that knocking in the gasoline engine is due to the formation, during compression, of unstable peroxides, as first reported by B. T. Brooks. The French authorities found that a mixture of hydrocarbons and air, when under atmospheric pressure, involves two ignition temperatures, one between 482° F. and 572° F., and the other above 824° F. The first being due to the formation of peroxides which start to form at around 248° to 266° and are completely decomposed below 572° F. It may then be reasoned that if the temperature of the mixture is increased, the zone corresponding to the existence of the peroxides can be passed over quickly enough to avoid the knocking. This was experimentally demonstrated in the testing laboratories of the French Office for Liquid Fuels. The tests were made with the C.F.R. engine at 600 r.p.m., the cooling medium being a water solution of ethylene glycol at a constant temperature of 302° F., the temperature at a selected point in the explosion area being indicated by means of a thermo-electrical couple.

With the engine running, and the temperature well under control, compression was increased until knocking was unmistakably observed; and the temperature was noted. If the compression ratio be then further increased, detonation and temperature go on increasing. Then, at a certain temperature, knocking ceases; the engine then runs very smoothly, and goes on doing so if ignition is shut off. The temperature then continues to increase fairly rapidly and, at a given reading, backfires occur in the carburetor, stopping performance. By cutting the fuel supply and allowing the engine to cool a little the process can be repeated. Each time, provided that the compression ratio is sufficient (about 6 in the C.F.R. engine) knocking ceases when the thermo-electrical couple indicates a given temperature, 644° F. for pure gasoline. With a temperature below 302° F. for the cooling mixture, it has not been found possible to observe a disappearance of detonation.

SHELL

BIG FIGURES

Republic received the first order for Electric Weld Line Pipe April 11, 1929. Total production to July, 1933, exceeded

25,000,000
lineal feet.

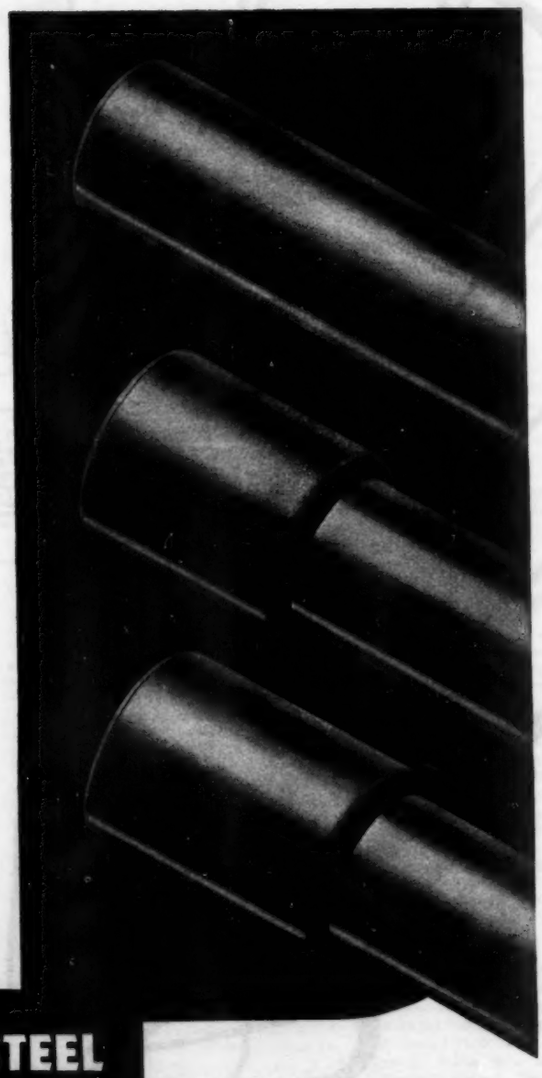
The first Electric Weld Casing was produced June 29, 1931. To the same date production has demanded almost

3,000,000
lineal feet.

The first Electric Weld Tubing was manufactured January 23, 1932. Sales during 18 months have exceeded

3,000,000
lineal feet.

With more than 30,000,000 feet of Republic Electric Weld Pipe placed in service in a remarkably short time, need more be said? If you would like to receive full descriptive information about this better pipe, write today for a copy of Catalog 210-B.



REPUBLIC ELECTRIC WELD
LINE PIPE · CASING · TUBING

REPUBLIC STEEL
CORPORATION
GENERAL OFFICES: YOUNGSTOWN, OHIO

NATURAL GAS DEVELOPMENTS

Approved Interpretation, Natural Gas PRA Code

The natural gas industry has had substitutions to the President's re-employment agreement approved which under B-2 state: "Load dispatchers, well operators, station operators and emergency maintenance and repair employes, their attendants and helpers, if highly trained and not readily replaceable, whose duties must be continuously performed in order to render the public safe and continuous service, may be employed not in excess of 48 hours per week as long as other competent employes are not readily available for such work; and in emergencies, such employes may work more than 48 hours per week but in no case shall the hours worked exceed an average of 48 hours for six consecutive weeks. All employers subject to this code shall proceed with the training of additional employes as rapidly as is consistent with the rendition of safe and continuous service so that by March 1, 1934, as many employes as possible may be reclassified under 40 hours per week limitations; and reports shall be made on that date of the extent of such reclassification to the National Recovery Administration."

Interpretation: Gas-conditioning plant operators whose presence is essential to the efficient and safe operation of gas-conditioning plants, are interpreted to be in the class of station operators and come under the same provisions as to hours of labor as provided in the substitutions approved for the natural gas industry.

Outlet for Burrton Gas to Inland Pipe Line Co.

An increased market outlet for the Burrton gas field in western Reno County, Kansas, apparently is assured with the granting of a permit for the construction of a pipe line from this gas area to Emporia by the Inland Pipe Line Co.

Except for the sale of a small amount to the Cities Service Gas Co., this field with an open flow of more than 300,000,000 feet daily has been almost bottled up since its was discovered 2½ years ago.

The Burrton area boasts the largest gas well ever drilled in Kansas. Art Olson and Shell Petroleum Corp.'s No. 1 Goering, in Section 26-23-4w, and with an open flow of 110,000,000 feet of gas.

Several towns along the route from Burrton to Emporia may be served with gas by the Inland company, officials say.

Texas Occupation Tax on Gas Again Proposed

AUSTIN, Tex., Oct. 2.—A bill providing for 2 cents per 1,000 feet occupation tax on natural gas has been introduced in the house by Representative Cecil Botief of Cross Plains.

The tax would be payable quarterly on natural gas produced, transported, sold or delivered or imported into the State for use as light or fuel.

The gas companies would be entitled to an exemption of 200,000,000 feet from the total amount of gross production for each quarter before calculating the amount of tax due and from the gas used in drilling and production.

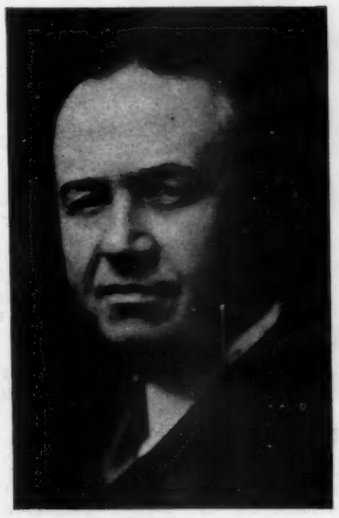
The bill provides a fine of not less than $500 nor more than $1,500 for each 10 days of failure to comply with the law.

A.E. Bradshaw Named New President of Oklahoma Natural Gas Corporation

Steps toward reorganization of the Oklahoma Natural Gas Corp. and sale of its assets and liabilities to a new company were taken in Federal Court as Federal Judge Franklin E. Kennamer set November 8 for the sale on a creditor's bill.

Gas Utilities, Inc., holding company of Oklahoma Natural Gas, had filed a suit seeking to collect $3,327,172 in loans made to the subsidiary.

Judge Kennamer, proceeding along the lines of the reorganization plan, set November 14 for a hearing for confirmation. Meanwhile, the new company will be set up.



A. E. BRADSHAW

A. E. Bradshaw, executive vice president of the First National Bank & Trust Co. of Tulsa and a member of the committee that has been working on the plan, has been made president of the company. Robert W. Hendee, former president, becomes vice president. F. E. Kistler, former chairman of the board, becomes chairman of the finance committee.

Bondholders are reported satisfied with the reorganization plan, as provision is made for the Central Utilities to advance money for payment of interest and sinking fund on the bonds, now in technical default.

Judge Kennamer directed that the order appointing a receiver for the company be vacated immediately after the appeal against the receivership order has been dismissed.

The court authorized the issue of $2,150,000 of certificates of indebtedness to be sold immediately to enable the company to meet overdue taxes, interest and sinking fund payments and thus cure defaults on the first mortgage. Since the plan is to be carried out under supervision of the court the securities probably will not have to be registered under the new Securities Act.

After the sale of the properties of Oklahoma Natural Gas to a new corporation on November 8 the first mortgage bonds will be left undisturbed and will be assumed by the new concern. The general mortgage bonds held by the Gas Utilities Co. are to be extended to November 1, 1941. Gas Utilities is to surrender for cancellation $3,327,172 of demand or short-term notes and is to receive $3,500,000 of series B notes and at least 443,008 shares of common stock.

Gas Utilities will deliver to the new company all of the capital stocks and all of the assets of the Oklahoma Building Co. (owners of the Oklahoma Natural Building in Tulsa), all assets of the Texokan Oil Co., $300,000 of the principal amount of the $950,000 issue of general mortgage bonds and 20,000 shares of the common stock in the Natural Gas Producers Corp.

Gas Utilities will give the new company an option to purchase within one year all the outstanding capital stocks of Muskogee Natural Gas Corp. and the Southwestern Natural Gas Co. for $300,000 of series B notes.

The new company is authorized to issue $1,650,000 of Series A and $3,800,000 of Series B eight-year 5 per cent notes, and 95,002 shares of $50 par 6 per cent preferred stock and 550,000 shares of no par common stock.

Holders of customer-owned 6½ per cent preferred stock in the old company may receive for each share either $75 principal amount of Series A notes and one-half of one share of new preferred, or $75 principal amount of Series A notes and one share of common stock, or one share of common stock and one share of preferred stock.

Holders of noncustomer-owned 6½ per cent preferred may receive for each share one share of new common and one share of new preferred stock; while holders of 7 per cent preferred may receive for each share one share of new preferred and one and one-tenth shares of new common stock.

Above the 443,008 shares of common stock to be received by the Gas Utilities, it is to receive as much of the remaining 106,992 shares as are not subscribed to by preferred stockholders.

The modified plan, which has been substituted for one dated May 11, provides also for the funding and extending of a major part of the short-term debt to improve the company's current condition, and place it in a more favorable position for obtaining temporary bank loans when needed.

PENNSYLVANIA PIPE LINE

COUDERSPORT, Pa., Oct. 2.—The laying of a new 8-inch natural gas pipe line from Sylvania, Potter County, to Betula, McKean County, has been completed and provides the first outlet from the Hebron, Potter County, deep gas field opened two years ago. The new line was built by the Sylvania Corp., a subsidiary of the United Natural Gas Co., and is approximately 30 miles in length.

FEDERAL TAX ON NATURAL GAS?

Natural gas circles are exercised over indications that an equalization tax will be proposed to Congress by NRA spokesmen to tax away the higher heating efficiency of natural gas, compared with the manufactured product.

Natural Gas Sales Gain First Since April, 1930

Sales of manufactured and natural gas aggregated 77,396,700,000 feet in August, an increase of 4.4 per cent over the corresponding month of 1932, it is announced by Paul Ryan, chief statistician of the American Gas Association. This was the first increase registered by the industry as a whole in nearly three and one-half years or since April, 1930. In spite of augmented sales, however, revenues continued to lag, income for August amounting to $45,167,400 compared with $46,187,800 in August a year ago, a decline of 2.2 per cent.

Most of the sales expansion was the result of pronounced increases in gas sales to industrial users, particularly in the case of the natural gas companies. During August sales of natural gas totaled 51,839,500,000 feet, an increase of nearly 7 per cent, while revenues for the month were $16,872,200, a gain of 2.3 per cent.

Because of the relatively smaller proportion of industrial business, the manufactured gas companies did not participate to the same extent in the general sales increase, manufactured gas sales for the month amounting to 25,557,200,000 feet, or substantially the same as for the preceding year, while revenues were off nearly 5 per cent.

For the eight months ending August revenues of the entire industry aggregated $457,951,100 or 7 per cent below the preceding year, while gas sales amounted to 788,591,300,000 feet, a drop of 2.3 per cent.

Fort Worth City Council Busy on Rate Ordinances

FORT WORTH, Tex., Oct. 2.—Drafts of two ordinances affecting gas distribution and rates here were ordered by the city council utilities committee. One ordinance, designed to pass on to consumers the 8-cent decrease in gas rates ordered by the Texas Railroad Commission, was ordered to be prepared by City Attorney Rouer so that it can be made effective immediately if legal hindrances are removed. Enforcement of the gate rate reduction order now is restrained by a temporary injunction granted by a Federal Court at San Antonio.

The second ordinance, asked after the utilities committee had heard a technical discussion by Mortimer Jones, gas engineer, on the effect of pressure on the heating qualities of gas, would require that domestic gas be delivered at a pressure of 8 ounces.

The city council adopted a resolution asking Governor Miram A. Ferguson to seek an appropriation from the legislature to enable the attorney general to defend the Texas Railroad Commission in litigation over its gas gate rate reduction order.

The council also voted to retain its membership in the Texas League of Municipalities, at a cost of $150 a year, as a means of bringing the united influence of cities of the State to bear in causing the legislature to make the gas rate litigation appropriation.

CABOT LAYING LINE

Godfrey L. Cabot, Inc., has started laying 5½ miles of 8-inch pipe line connecting Pipe Creek with the Booger Field, Tyler County, West Virginia. Fifty men have been given employment on this project, according to L. J. Morris, superintendent.

PERSONAL PARAGRAPHS

William Mee, of East Texas, recently arrived in Mount Pleasant to operate in the Michigan fields.

• • •

Lloyd Fugate, of Adairville, Ky., visited his brother-in-law, Walter L. McClanahan, last week in Mount Pleasant, Mich.

• • •

F. E. Heath, geologist for the Sun Oil Company, Dallas, Tex., has been spending some time in Santa Fe, N. Mex., on business.

• • •

Harry Leyendecker, chief scout for the Tide Water Oil Company, Houston, Tex., has been spending his vacation in Fort Worth, Tex.

• • •

Everette Meaders, scout for the Stanolind Crude Oil Purchasing Company, Wichita Falls, Tex., has been transferred to Wichita, Kans.

• • •

J. H. Pressley, head of the land department for the Sun Oil Company, Dallas, Tex., has returned with his family from a trip to Chicago.

• • •

George B. Jenkinson, Jr., chief geologist in the Rocky Mountain region for the Stanolind Oil & Gas Company, has been transferred to the Tulsa offices.

• • •

W. W. Proctor, pipe line scout for the Gulf Production Company, Tyler, Tex., is spending his vacation at Victoria and other points on the Gulf Coast.

• • •

B. N. Burns, formerly with the Oil Well Supply Company, at Olney, Tex., is now with the Hazard Wire Rope Company, with headquarters in Fort Worth, Tex.

• • •

J. C. MacQuiddy, marine superintendent of the Standard Oil Company of California, for several years, is convalescing satisfactorily from a recent appendicitis operation.

• • •

Harry B. Kueny, of the Union Oil Company, has been transferred from Los Angeles to the company's Oleum refinery in the San Francisco Bay region on a special assignment.

• • •

John H. Meyers, former sales engineer of the American Hammered Piston Ring Company, Baltimore, Md., has been made works manager of the Baltimore plant of the company.

• • •

F. O. Prior, president; W. R. Calvin, personnel supervisor, and H. W. Klein, general superintendent, Stanolind Oil & Gas Company, Tulsa, made an inspection of company properties and activities in Texas, New Mexico, Colorado, and Wyoming last week making the trip by airplane.

• • •

L. C. McCloud, superintendent of the Col-Tex refinery at Colorado, Tex., for seven years, has been transferred by his company to Los Angeles, Calif. M. H. Lipp, superintendent of the Pasotex refinery at El Paso, Tex., has moved to Colorado to take charge of the place left vacant by Mr. McCloud.

• • •

John M. Lovejoy, president of the Seaboard Oil Company; E. L. Shea, president of the Tide Water Oil Company, New York; and C. P. Watson, vice president of the former company, of Los Angeles, Calif., have been in Texas watching results of a test being made by the companies in Anderson County.

• • •

R. A. Cattell, chief engineer of the Petroleum and Natural Gas Division of the U. S. Bureau of Mines, with headquarters in Washington, D. C., is visiting the station at Bartlesville, Okla., in connection with a trip which will cover all the stations in the petroleum and natural gas division of the Bureau of Mines. Mr. Cattell formerly was superintendent of the Bartlesville Station and later had charge of the helium division of the Bureau of Mines.

C. D. Johnson, Rocky Mountain geologist, has returned to Denver, Colo., after some geological work in northern Montana. His father, J. D. Johnson, died recently at his home in St. Louis, Mo., aged 89 years. He was formerly chief counsel for the Pierce Oil Corporation.

Men of the Industry

LEO HUFF

Leo Huff, manager of the Pure Oil Company's motor transport department, entered the oil business as an automobile mechanic for the Texas Company in Houston, Tex., in 1911, when motor trucks were being introduced in the oil industry to replace horses and wagons. Following that he became successively shop foreman, supervisor of motor equipment and manager of operations, which included supervision of construction and maintenance of service stations and bulk plants along with jurisdiction over transportation activities. Later he was put in charge of the automotive department.

In 1923 Mr. Huff resigned from the Texas Company, conducted a small oil and tire business of his own in St. Louis, Mo., for a short time, organized a transportation system for the Lubrite Refining Company in that city and then entered the service of the Pure Oil Company as motor transport superintendent in the northwestern division. Later he was transferred to New York as motor transport superintendent in the eastern division, eventually becoming superintendent of the central motor transport division, working out of Columbus, Ohio. In the spring of 1927 Mr. Huff was transferred to Chicago and put in charge of all motor transportation of the producing, pipe line and refinery divisions. Soon afterward his jurisdiction was extended to include the marketing divisions, with promotion to his present position. Since then his jurisdiction has been widened still further to cover the motor transport operations of Pure's southern and affiliated companies and water transportation of the producing division, with its tugs, work-boats and barges.

Mr. Huff was born in St. Louis and attended the public schools there, later studying mechanical engineering in Washington University and taking a course in the Rankin Trades School. With Mrs. Huff and their two sons, he resides in Evanston, Ill. His hobby is horseback riding.

Paul N. Gregg, vice president and general counsel of the Union Oil Company of California, has sailed for Honolulu for a brief vacation.

• • •

H. J. Zinn, representative of the Hazard Wire Rope Company, Odessa, Tex., has been called to Butler, Pa., by the death of his mother, Mrs. C. C. Zinn.

• • •

Roland B. Paxson, chief geologist for the Continental Oil Company, Houston, Tex., addressed the Lions Club luncheon recently on "The Salt Dome of Houston."

• • •

Dick Alden, of the Phillips Petroleum Company, has been spending several days in New York and other Atlantic Coast cities in the past week in the interests of the extended utilization of liquefied gases.

• • •

John M. McGregor, of the McGregor Engineering Company, Tulsa, has been appointed district representative for the Byron Jackson Pump Company, Berkeley, Calif., for Oklahoma and southeastern Kansas.

• • •

C. L. Hightower, safety engineer for the Texas Pacific Coal & Oil Company, Fort Worth, Tex., and general chairman of the Petroleum Section of the National Safety Council, is in Chicago on business pertaining to that organization.

• • •

W. D. Daniels has been placed in charge of the Porter district, Midland County, Michigan, and C. H. Cunningham of the Vernon-Leaton division of the Pure Oil Pipe Line Company, it is announced by David Beach, general superintendent.

• • •

James Imes, of Butte, Mont., sales manager in that territory for the Texas Company, has been adopted into the Crow Indian tribe. The adoption ceremony was conducted by Chief Max Big Man who gave him the name of "Travel Well Known."

• • •

Dr. L. C. Snider, consulting geologist, Henry L. Doherty & Company, 60 Wall Street, New York City, is on a tour of the Mid-Continent Fields in the interest of his company. He spent some time in Oklahoma last week and went from there to Dallas and East Texas.

• • •

R. S. McKeever, vice president, Smith Separator Company, Tulsa, is in Marshalltown, Iowa, visiting the plant of Fisher Governor Company to become better acquainted with this line which his company will now distribute in western Arkansas, Oklahoma, northern Texas and eastern New Mexico.

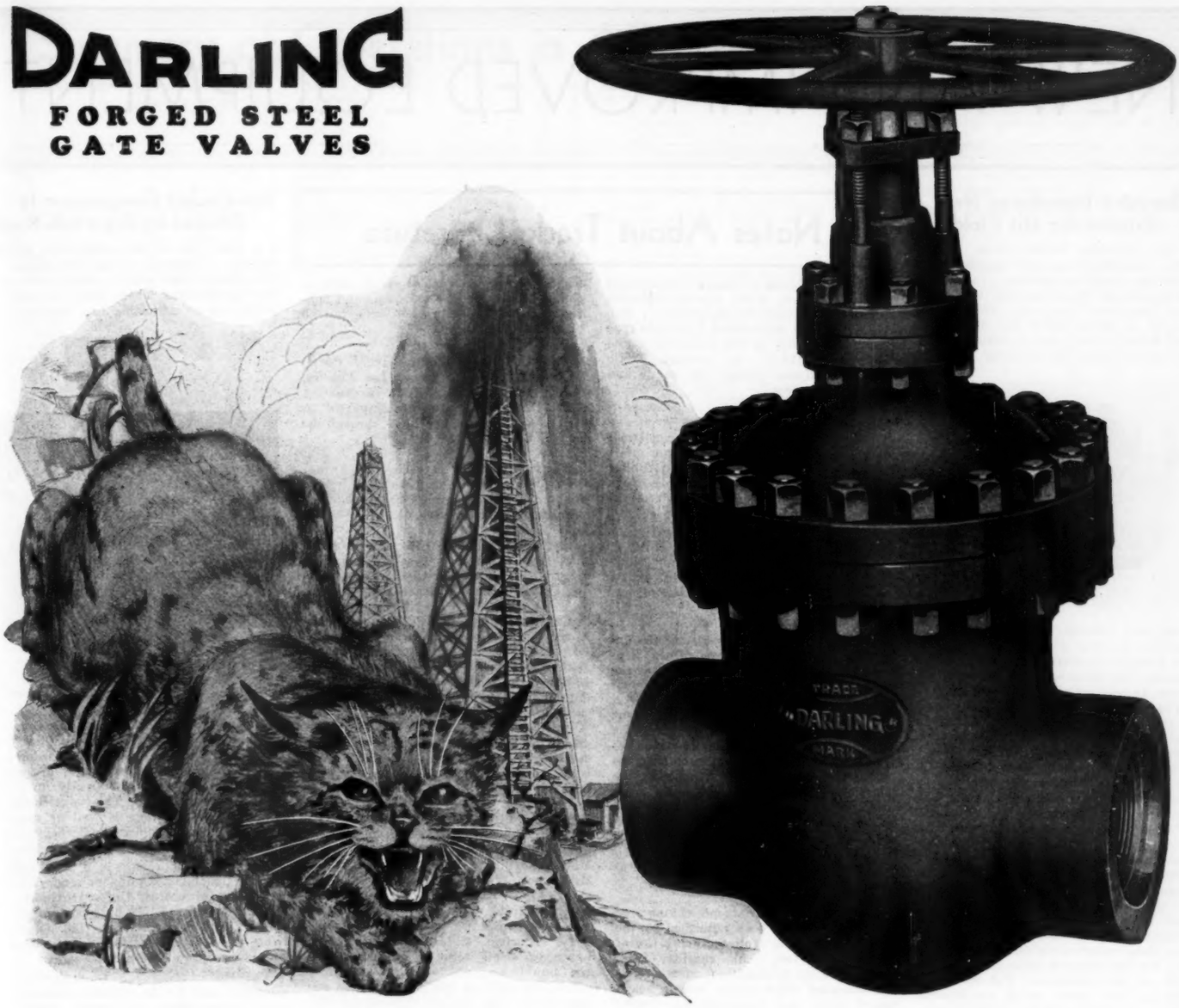
• • •

Ed H. Griswold, formerly technical advisor to the president of the Continental Oil Company, New York, has been transferred to Fort Worth, Tex., to be assistant to George McIntyre, division manager in the Southwest. John Nicklos has been transferred to Houston, Tex., from Fort Worth to become district manager of the Gulf Coast. T. R. Batte, Jr., has been appointed technical advisor to the president and has moved to New York.

• • •

Prof. Harold C. George, head of the department of oil and gas production, University of Pittsburgh, Pittsburgh, Pa., announces that the following engineers have accepted appointment as members of the advisory committee for petroleum and natural gas studies for his department: Ralph E. Davis, petroleum and natural gas engineer, Pittsburgh; Paul D. Foote, executive vice president of the Gulf Research & Development Company, Pittsburgh; Kenneth C. Heald, chief geologist, Gulf Companies, Pittsburgh; E. L. Estabrook, petroleum engineer, Standard Oil Company of New Jersey, New York; C. V. Millikan, chief engineer, Amerada Petroleum Corporation, Tulsa, and J. French Robinson, manager, Lycoming Producing Corporation, Wellsboro, Pa.

DARLING
FORGED STEEL GATE VALVES



All Set for the Unexpected!

Don't be caught napping when the unexpected wildcat has its fling. The highest pressures are safely controlled by Darling Forged Steel Valves. *Doubly* strong and *positive* in action these valves offer formidable resistance to the heaviest onslaughts of gas and oil.

The Darling Forged Steel Gate Valve can be furnished in Inside Screw, Stationary Stem Type, in Screwed Ends, Flanged Ends and Flanged Ends with Companion Flanges bolted on.

Detailed information on request.

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NEW YORK OKLAHOMA CITY HOUSTON

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Hickey Pipe & Supply Company, 3375 East Slauson Avenue, Los Angeles, Calif.

NEW AND IMPROVED EQUIPMENT

Hercules Introduces New Engine for Oil Field Use

The Hercules Motors Corp., Canton, Ohio, has developed a six-cylinder solid-injection, high-compression, full Diesel engine for oil field automotive and general industrial purposes. This engine, known as Model DX1, has 5-inch bore and 6-inch stroke, and is constructed to operate at speeds up to 2,000 r.p.m. Its

design and construction follow the usual Hercules practice with particular attention given to symmetry, compactness, and pleasing appearance, with accessibility, durability and reliability as requisites.

The underhung crankshaft is supported by the crankcase which can be had in either aluminum or cast iron, and which extends 4 inches below the crankshaft center, thus forming a deep tubular rib to give side stiffening to the case, and to it is bolted a pressed steel oil pan. The crankcase extends above the crankshaft sufficiently to give vertical stiffness to the case, upon which is supported a one-piece cast iron cylinder block and two cylinder heads, each covering three cylinders. Wet type cylinder liners are fitted into the block. Through bolts from the main bearing caps pass through the crankcase, cylinder block and heads to clamp these members rigidly together and carry vertical stresses from the cylinder heads to the crankcase. The eccentric heads on these bolts, which are located in recessed holes in the top of the crankcase, prevent the bolts from turning when the main bearing nuts or the cylinder head nuts are drawn up.

Because of the through bolt construction with the eccentric heads, any parts above the crankcase can be removed without disturbing the main-bearing caps if occasion require it.

In general the external mounting dimensions have been made interchangeable with the Hercules HX series of gasoline engines.

The DX1 will develop from 100-horsepower at 1,000 r.p.m. to 117 horsepower at 1,800 r.p.m., and 188 horsepower at 2,000 r.p.m. with a B.M.E.P. of 110.3 pounds, 109.6 pounds and 105.5 pounds, respectively.

The fuel consumption is .383 pound per brake horsepower per hour at 1,000 r.p.m., .430 pound per brake horsepower at 1,800 r.p.m., and .46 pound per brake horsepower hour at 2,000 r.p.m. with the above B.M.E.P.

WAUKESHA HAS TULSA BRANCH

The Waukesha Motor Co., Waukesha, Wis., manufacturer of multicylinder engines, is establishing a Mid-Continent distributing branch at 313 East Second Street, Tulsa, with Arch F. Campbell as resident representative. It will serve Kansas, Oklahoma, Texas, Arkansas, Louisiana and New Mexico, and be a complete service office, with parts for Diesel, oil, gas, natural gas and electrical engines.

Notes About Trade Literature

The Worthington Pump & Machinery Corp., Harrison, N. J., has the following publications ready for distribution: Bulletin S-550-85, on vertical four-cycle type gas engines, 180 to 360 horsepower, and Bulletin D-316-81, on vertical Freflo type centrifugal pumps for sump and drainage services.

—

The September issue of Oxy-Acetylene Tips, published by the Linde Air Products Co., New York, contains an interesting article on "Safe-Ending Boiler Tubes," explaining in detail a procedure for reclaiming tubes after their removal from fire-tube boilers.

—

A bulletin issued by C. B. Hunt & Son, Salem, Ohio, describes and illustrates the Quick-as-Wink shutoff valve, which is said to operate as simply as turning on an electric light.

—

"The Age of Armor" is among the unusually interesting contents of the September "Puddle Ball," published by the Reading Iron Co., Philadelphia, Pa.

—

"I jumped my oil sales 50 per cent and here's the way I did it," says the first page of a 12-page booklet which offers a series of pictures illustrating the use of the Canco dispenser, made by the American Can Co.

—

The Acheson Oildag Co., of Port Huron, Mich., has available for distribution Bulletin No. 130-B, dealing with "Colloidal Graphite as a High Temperature Lubricant."

—

Catalog 583 on Diamond chains and sprockets has just been published by the Diamond Chain & Manufacturing Co. of Indianapolis, Ind. This catalog of 96 pages contains information on where to use Diamond roller chain, how to select proper sizes and sprockets, calculation formulas and tables for determining chain length, 60 pages of tables giving data on chains of various pitches, single and multiple strand, and sprocket data for all pitches of chain.

—

The Oil Well Manufacturing Corp., 6000 South Alameda Street, Los Angeles, Calif., has for distribution a bulletin emphasizing the longer life imparted to Red Devil slush-pump liners through the use of a special alloy.

—

The Star Drilling Machine Co., Akron, Ohio, offers a four-page bulletin telling about the advantages of Star machines for drilling and cleaning out.

—

A four-page bulletin descriptive of the new Rego GX all-purpose torch is being sent on request by the Bastian-Blessing Co., 240 East Ontario Street, Chicago.

—

Catalog 33, obtainable from the Taylor Forge & Pipe Works, Chicago, contains 64 pages of interesting information. Along with a discussion of Taylor spiral pipe in its various uses it gives engineering data of high value.

—

Fairbanks, Morse & Co., Chicago, have ready for mailing a bulletin of 12 pages describing and illustrating the Fairbanks-Morse single-stage split-case centrifugal pump.

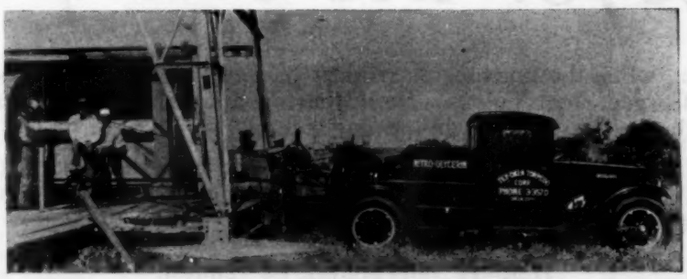
—

Services offered by the Stearns testing laboratory are explained in a four-page bulletin prepared by the Magnetic Manufacturing Co., Department TL, Milwaukee, Wis.

—

A new fluid valve is the subject of a four-page leaflet issued by the Westinghouse Electric & Manufacturing Co. Large or small volumes of compressed air, liquid mediums such as gasoline, water, oil, and gas can be controlled accurately by the use of this electrically operated check valve.

International Specially Equipped for Shooting Wells

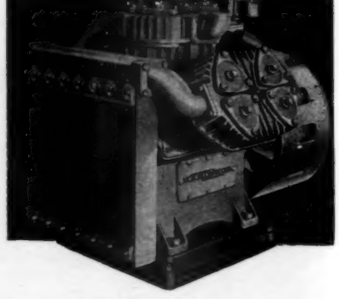


The picture shows a Model B-3, 1½-ton, 6-cylinder International, operated by the Texas-Oklahoma Torpedo Corp. It is equipped with special body designed by Howard H. Greene, manager, for use in shooting oil wells.

Following is the equipment used: Special insulated 200-quart L.N.G. box; 500-pound capacity solidified nitroglycerin and dynamite compartment; one time-bomb rack, capacity seven bombs; one blasting machine; one electric bomb rack, capacity 12 bombs; 500 feet electric ground wire; one casing squib box (on running board); one box for torpedo line pulley, hooks, weights, rope (on running board); specially built motor-driven reel (take-off); one 7,500-foot regular torpedo wire; one 8,000-foot specially built steel electric wire (insulated); one Howard Greene measuring device and weight indicator (special box on rear for it when not in use); one large shell rack; exhaust and muffler asbestos insulated; one 7-20 spare tire; reel clutch, brake, and motor throttle on rear of truck.

Air-Cooled Compressor Is Offered by Ingersoll-Rand

A new type of air compressor which requires no cooling water and which is accordingly particularly adapted to certain applications where water is scarce, costly, or objectionable has been devel-



oped by Ingersoll-Rand Co., 11 Broadway, New York.

The new machine is called the motor-compressor and, as the name implies, it has a built-in motor. The motor rotor is carried on the compressor shaft and the motor frame is bolted directly to the compressor crankcase. This construction eliminates a coupling, as well as motor bearings. A rigid subbase underneath the entire unit makes a compact machine.

The motorcompressor is a 2-cylinder, 2-stage machine. Cylinders and intercooler are air-cooled. Units are built in sizes from 20 to 50 horsepower, with piston displacements from 113 to 310 cubic feet per minute and for discharge pressures up to 125 pounds gauge.

The motorcompressor is designed to meet the need for an efficient, moderate-size, motor-driven, air-cooled compressor. It can be used for general service or as a standby unit wherever air is required, but is especially suited for locations where water cooling is objectionable or out of the question because of the freezing hazard or for other reasons.

Strength and Simplicity Combined in Rope Socket

A new product announced by the American Steel & Wire Co., 208 South LaSalle Street, Chicago, is the Fiege tiger-claw wire-rope rope socket, which is said to offer 100 per cent cable strength and to solve in a simple manner many perplexing and sometimes costly problems.

The tiger-claw socket requires no flame or hot metal and is attached quickly, with ordinary labor, in the field. It is composed of three simple parts—a socket, a sleeve and a plug. These three items accomplish the entire job. This new socket is said by the manufacturers to have established new standards for safety and lower operating costs in the handling of wire rope.

Emmett K. Conneely has been appointed manager of railroad sales by the Republic Steel Corp. Mr. Conneely served in various capacities with the Pittsburgh & Lake Erie Railroad and became vice president of the Pullman Co. and of the Standard Steel Car Co.

Summary of Operations in All Fields for August, 1933

SUMMARY OF COMPLETED WORK

	Comp.	Prod.	Dry	Gas
Eastern	174	814	18	26
Central Ohio	34	178	13	15
Lima	13	225	5	2
Indiana	14	175	3	9
Michigan	25	17,111	6	1
Kentucky	30	373	16	0
Illinois	3	2	2	0
Kansas	33	11,145	5	2
Oklahoma	70	14,458	28	4
North Central Texas	81	2,330	45	5
East Texas	200	13,859	6	0
West Texas	23	3,748	6	1
Texas Panhandle	15	2,560	0	2
Southwest Texas	70	14,948	44	3
Texas—Gulf Coast	107	32,252	24	6
La.—Gulf Coast	25	5,962	18	0
North Louisiana	40	3,040	23	7
East Texas gas area	4	0	4	0
Arkansas	5	0	5	0
Mississippi	2	0	1	1
New Mexico	4	23,068	2	0
Wyoming	8	28	2	3
Montana	8	354	0	1
Colorado	3	0	3	0
Total August	993	195,630	279	88
Total July	836	198,652	235	75
Difference	157	22	44	13

RIGS AND WELLS DRILLING

	Rigs	Drlg.	Ttl.
Eastern	59	220	279
Central Ohio	29	88	117
Lima	1	27	28
Indiana	1	29	30
Michigan	104	107	211
Kentucky	2	54	56
Illinois	1	13	14
Kansas	40	122	162
Oklahoma	74	299	373
North Central Texas	43	141	184
East Texas	63	169	232
West Texas	16	97	113
Texas Panhandle	15	36	51
Southwest Texas	25	115	140
Texas—Gulf Coast	64	159	223
La.—Gulf Coast	13	39	52
North Louisiana	36	93	129
East Texas gas area	6	11	17
Arkansas	7	26	33
Mississippi	8	15	23
Alabama	0	4	4
New Mexico	6	54	60
Wyoming	8	66	74
Montana	4	41	45
Utah	1	17	18
Colorado	5	48	53
Total August	631	2,090	2,721
Total July	513	1,895	2,408
Difference	118	195	313

Note—In the following report the Section, Township and Range are given first; then the farm, the owner, the serial number of the well and the initial production of the well. In lines where the Section, Township and Range are missing the wells are located in the Sections, Townships and Ranges which appear next above in the report.

Oklahoma Fields

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Atoka	1	0	1	0
Carter	6	1,725	1	0
Caddo	1	0	1	0
Creek	9	360	2	0
Cleveland	1	0	1	0
Cotton	1	0	1	0
Garfield	1	0	1	0
Hughes	3	135	1	0
Logan	1	5,270	0	0
Muskogee	1	0	1	0
Noble	4	0	4	0
Oklahoma	2	2,828	0	0
Osage	11	314	4	0
Okmulgee	5	12	1	2
Pawnee	1	0	0	1
Pottawatomie	5	1,327	0	0
Seminole	3	2,412	0	0
Stephens	2	15	0	0
Tulsa	5	60	2	1
Tillman	1	0	1	0
Wagoner	6	0	6	0
Total August	70	14,458	28	4
Total July	59	18,703	21	7
Difference	11	3,245	7	3

Rigs and Wells Drilling

County—	Rigs	Drlg.	Ttl.
Atoka	2	7	9
Blaine	0	1	1
Beckham	1	3	4
Caddo	0	4	4
Coal	0	4	4
Carter	1	3	4
Creek	6	33	39
Choctaw	0	1	1
Comanche	0	2	2
Ellis	0	1	1
Greer	1	0	1
Grant	1	0	1
Grady	0	1	1
Garfield	0	4	4
Hughes	6	24	30
Jefferson	0	5	5
Kay	0	4	4
Kiowa	0	3	3
Logan	2	11	13
Lincoln	0	4	4
Marshall	4	4	8
McIntosh	1	1	2
Muskogee	3	9	12
Murray	2	0	2
Noble	4	11	15
Okmulgee	3	16	19
Oklahoma	21	26	47
Okfuskee	2	4	6
Osage	1	26	27
Payne	0	4	4
Pontotoc	1	13	14
Pottawatomie	4	27	31
Pittsburg	2	3	5
Pushmataha	0	1	1
Seminole	2	11	13
Stephens	2	9	11
Tulsa	1	8	9
Tillman	0	2	2
Wagoner	1	6	7
Washita	0	3	3
Total August	74	299	373
Total July	99	250	349
Difference	25	49	24

WELLS COMPLETED

ATOKA COUNTY

18-1n-15e Basket, Wacker et al 1 ..... dry

Completed 1
Dry 1

COTTON COUNTY

10-2s-11w Bradley, N. S. Davis 1 ..... dry

Completed 1
Dry 1

STEPHENS COUNTY

27-1s-5w Green, Braden-Overton 15 ... 5
18-2s-6w Pierce, Athey-Lively 1 10

Completed 2
Production 15

TILLMAN COUNTY

27-4s-15w A-Co-Do-Poney, Gypsy Oil Co. 1 ..... dry

Completed 1
Dry 1

NOBLE COUNTY

19-20-2w Farr, Shell Pet. 1 ..... dry
21-20-2w Graves, Champlin Ref. 1 .... dry
15-23-3w Washburn, Mid Co. 1 (O.W.D. D.) ..... dry
15-20-2w Jerome, Sinclair Prairie 1 .. dry

Completed 4
Dry 4

POTTAWATOMIE COUNTY

26-6-4 West, Magnolia Pet. 1 267
3-7-4 Brandenburg, J. Head et al 1 .. 100
9-7-4 Pierson, Brackett 1 200
31-7-5 Viaux, Mid-Cont. Pet. 1 200
6-6-5 Schrader, Mid-Cont. Pet. 2 560

Completed 5
Production 1327

SEMINOLE COUNTY

22-7-5 Tobin, Wood 1 47
20-9-6 Campbell, Carter Oil 6 1423
2-8-5 Rogers, Carter Oil 6 942

Completed 3
Production 2412
Gas production 2,500,000

LOGAN COUNTY

28-17-4w McConnell, Gypsy Oil and Carter Oil 1 5270

Completed 1
Production 5270

MUSKOGEE COUNTY

17-13-17 Escoe, J. S. Routt 1 ..... dry

Completed 1
Dry 1

OKMULGEE COUNTY

22-13-11 Kremer, M. & M. Drlg. 1 8
28-13-11 Roberts, J. H. Rebold 5 ..... gas
11-13-12 Davis, Baker Bros. 5 ..... gas
4-12-14 Porter, McInturff 1-B ..... dry
19-13-13 Lee, Wicks et al 5 4

Completed 5
Production 12
Dry 1
Gas 2
Gas production 4,750,000

OSAGE COUNTY

26-21- 9 Mathews et al 1 ..... dry
3-23- 8 E. C. Todd 8 10
25-23- 8 H. H. Markee 13 ..... dry
12-24- 7 National Ref. 1 15
28-24- 7 Lewis Prod. 3 75
10-24- 6 Sinclair Prairie 1 50
30-24- 8 Galt Brown 2 7
8-22-11 R. L. Craig 3 ..... dry
21-24- 7 Continental Oil 1 154
25-24- 7 Bay Oil 1 3
15-24- 8 F. W. Penny 7 ..... dry

Completed 11
Production 314
Dry 4
Gas production 6,500,000

PAWNEE COUNTY

27-20-9 Mitchell, Krasne Drlg. 2 ..... gas

Completed 1
Gas 1
New gas production 250,000

GARFIELD COUNTY

9-24-6w Muller, Love & Martin 1 .... dry

Completed 1
Dry 1

OKLAHOMA COUNTY

22-11-3w Hardcastle, Phillips Pet. 1 (4 hrs.) 1730
26-11-3w Berg, Shell Pet. 1 (4 hrs.) .. 1098

Completed 2
Production 2828

CREEK COUNTY

2-17-8 Fuhrman, Shamblin et al 1 .. 130
26-18-8 Escoe, J. E. Crosbie, Inc. 6 .. dry
6-18-7 S. Vance, Charles Giblin et al 1-A 20
27-18-8 Escoe, Gled Oil Co. 3 50
34-18-8w Wilson, F. L. Marrs 2 90
7-19-7 Deere, C. L. Sutton 2 ..... dry
12-19-9 Allen, J. E. Abbott et al 15
29-19-9 Boyd, Johnson O. & R. 3 15
29-19-9 Grissell, Johnson O. & R. 1... 40

Completed 9
Production 360
Dry 2

CARTER COUNTY

25-1s-2w Major, A. Lloyd Oil Co. 2 613
30-1s-2w Burton, K. D. Oil Co. 3 214
30-1s-2w Burton, K. D. Oil Co. 4 181
30-1s-2w Burton, K. D. Oil Co. 5 552
13-1s-3w Carter, McFarland-Boggs 1 .. 160
24-1s-3w Richards, Kanaco Oil Co. 3-A. dry

Completed 6
Production 1735
Dry 1

WAGONER COUNTY

24-18-15 Hall, Sands Pet. 2 ..... dry
24-18-15 Derrisaw, Helvie & Stout 2.. dry
26-18-15 Drew, J. E. Martin 5 ..... dry
35-18-15 Lovett, Mays Drlg. 1 ..... dry
14-16-15 Smith, E. W. Ladd 1 ..... dry
Flowers, Best & Barton 1 .... dry

Completed 6
Dry 6

TULSA COUNTY

23-18-14 Carr, Kistler 1-A 20
19-19-10 Jackson, Johnson O. & R. 2 .. 40
14-18-14 Brown, Bickley et al 1 ..... gas
14-18-14 Brown, Callo & Dittman 1 ... dry
34-19-10 S. Frank, Phillips Bay Co. 1-A dry

Completed 5
Production 60
Dry 2
Gas 1
Gas production 500,000

Kansas Fields

Summary of Wells Completed

County—	Comp.	Prod.	Dry	Gas
Barton	3	1,093	1	0
Cowley	1	85	0	0
Elk	1	20	0	0
Greenwood	4	170	1	0
Harvey	11	6,288	0	0
McPherson	6	640	1	2
Norton	1	0	1	0
Rice	4	2,588	1	0
Stafford	1	180	0	0
Woodson	1	110	0	0
Total Aug.	33	11,145	5	2
Total July	49	21,818	12	0
Difference	16	10,673	7	2

Rigs and Wells Drilling

	Rigs	Drlg.	Ttl.
Barton	2	7	9
Butler	0	1	1
Cowley	0	1	1
Finney	1	0	1
Greenwood	0	8	8
Ellsworth	2	6	8
Graham	0	1	1
Harvey	16	33	49
Kingman	1	4	5
McPherson	8	33	41
Pratt	0	1	1
Reno	2	6	8
Rice	3	13	16
Russell	0	2	2
Rooks	0	1	1
Sal'ne	0	1	1
Sumner	1	0	1
Sedgwick	3	2	5
Rush	1	1	2
Trego	0	1	1
Total Aug.	40	122	162
Total July	30	92	122
Difference	10	30	40

WELLS COMPLETED

BARTON COUNTY

34-18-12w Sooey, Rankens 1 ..... dry
9-20-11w Schneider, Stanolind O. & G. 1 (14 hrs.) 168
16-20-11w Hauser, Stanolind O. & G. (21 hrs.) 925

Completed 3
Production 1093
Dry 1

McPHERSON COUNTY

12-18-4w Nelson, Clum et al 1..... dry
23-19-2w Russell, Helmerich & Payne 3B gas
26-19-2w Thomas, Roland Oil 1A..... 200
13-19-3w Swanson, Roth et al 1..... gas
11-19-2w Fleming, McPherson O. & G. 3 300
19-10-1w Sellars, Harris & Haun 1A.... 140

Completed 6
Production 640
Dry 1
Gas 2
Production 640

HARVEY COUNTY

16-22-3w Neufeldt Sinclair Prairie 1A.. 830
19-22-3w Martens, Mabee & Shell 2.... 600
19-22-3w Martens, Mabee & Shell 5.... 600
19-22-3w Martens, Producers & Ref. 3.. 1020
30-22-3w Smith, W. C. McBride Inc. 3.. 809
18-22-3 Neufeuldt, Sinclair Prairie 2.. 210
8-22-3w Nikkel, Shell Petr. 3 252
8-22-3w Andrees, Texas Co. 2, 3 hrs. 455
17-22-3w Schmidt, Derby O. & R. 2.... 768
17-22-3w Schmidt, Skelly & Selby 3, 16 hrs. 544
17-22-3w Schmidt, Hollow et al 2 200

Completed 11
Production 6288

RICE COUNTY

4-20-9w Wells, Yangston et al 1..... dry

Completed 4
Production 2588
Dry 1

GREENWOOD COUNTY

11-25- 8 Olson, Harwood Oil Co. 1..... dry
17-24-13 Hinchman, Schull Drg. 2..... 20
11-25- 8 Terchgraeber, Plains Petr. 5.. 50

Completed 4
Production 170
Dry 1

WOODSON COUNTY

28-23-14 Figgs, Harper et al 4..... 110
COWLEY COUNTY
20-32- 4 Hutton, McKnabb et al 1..... 86
STAFFORD COUNTY
27-21-13w Gates, Atlantic O. P. 1..... 180

East Texas Fields

Summary of Wells Completed

County—	Comp.	Prod.	Abd.	Ttl.
Freestone	1	0	1	0
Henderson	1	0	1	0
Hopkins	1	0	1	0
Hunt	1	0	1	0
Gregg	102	6,946	0	0
Rusk	61	4,097	0	0
Smith	19	974	0	0
Upshur	11	792	0	0
Van Zandt	3	50	2	0
Total August	209	12,859	6	0
Total July	159	10,158	16	1
Difference	41	2,701	10	1

Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl.
Anderson	0	1	1	2
Angelina	0	2	0	2
Bowie	0	0	2	2
Delta	0	1	0	1
Fannin	0	1	0	1
Franklin	1	0	0	1
Freestone	0	1	0	1
Gregg	15	9	45	69
Henderson	2	1	1	4
Hill	1	0	0	1
Hopkins	0	2	0	2
Hunt	0	1	0	1
Kaufman	0	1	1	2
Leon	0	2	0	2
Limestone	1	2	0	3
Morris	0	2	1	3
Navarro	0	0	1	1
Red River	0	1	1	2
Rusk	22	10	35	67
Smith	9	4	10	23
Titus	0	1	0	1
Upshur	10	5	12	27
Van Zandt	2	9	3	14
Total August	63	56	113	232
Total July	54	38	88	180
Difference	9	18	25	52

WELLS COMPLETED

FREESTONE COUNTY

Devonian Oil Co.'s No. 1 J. G. Beall .. abd
New Deal Oil Co.'s No. 1 O. Burleson .. abd

Completions 2
Abandoned 2

HENDERSON COUNTY

W. C. McGlothlin et al's No. 1 T. H. English ..... abd

Completions 1
Abandoned 1

HOPKINS COUNTY

Mudge Oil Co.'s No. 1 T. R. Cargill ... abd

Completions 1
Abandoned 1

HUNT COUNTY

Solar Exploration Co.'s No. 1-A N. A. Gregory ..... abd

Completions 1
Abandoned 1

GREGG COUNTY

Almeda Oil Co.'s No. 3 R. P. Doby, through open tubing 90
Atlantic Oil Producing Co.'s No. 6 Castleberry, open tubing 90
Atlantic Oil Producing Co.'s No. 42 Moore, open tubing 90
Barnsdall Oil Co.'s No. 9 Bingham, open tubing 100
East Texas Oil & Ref. Co.'s No. 4 T. W. Tuttle, open tubing, ½ hr. 40
East Texas Oil & Ref. Co.'s No. 8 White, open tubing, 20 min. 40
F. H. E. Oil Co.'s No. 10 D. C. Christian, open tubing 100
Foundation Oil Co.'s No. 3 L. Willis, open tubing 90
Gulf Prod. Co.'s No. 37 J. C. Judge, open tubing 64
W. L. Pickens' (receiver) No. 2 E. Hoyt, open tubing, ½ hr. 156
Rosier and Pendleton's No. 5 Sheffield, open tubing 60
Rowan and Nichols, open tubing, 35 min. 80
Stanolind and Simms Oil Co.'s No. 6 Percy McGeorge, open tubing 56
Steen Drilling Co.'s No. 6 Lodin, open tubing, ½ hr. 45
Adams and Lyles' No. 5 L. Howard, open tubing 88
Bass and Dillard's No. 2-B S. Carr, open tubing 85
Bay Oil Co.'s No. 6 Peterson, ¾-in. tubing, ½ hr. 70
Houston Oil Co.'s No. 7 M. B. Hughey, open tubing 101
Jones and O'Brien's No. 14 Hughey Ross, open tubing, ½ hr. 15
Reserve Pet. Co.'s No. 3-A A. Godfrey, open tubing 150
Yeager et al's No. 2 Howard, open tubing 90
Atlantic Oil Producing Co.'s No. 14 Duncan, open tubing 110
Atlantic Oil Producing Co.'s No. 44 Judge, open tubing 120

Bay Oil Co.'s No. 4 Wheeler, open tubing 90
Bristow and Wynn's No. 6 Moore, open tubing 105
East Texas Oil & Ref. Co.'s No. 5 R. R. Collins, 20 min. 22
East Texas Oil & Ref. Co.'s No. 6 C. Fisher, open tubing, 20 min. 25
Gulf Prod. Co.'s No. 38 Judge, open tubing 70
Reddick and Hugus' No. 3 Smith, open tubing 60
Selby Oil & Gas Co.'s No. 21-B Snavely heirs, open tubing, ½ hr. 62
Stanolind Oil & Gas Co.'s No. 4 B. Jones, open tubing 51
Sun Oil Co.'s No. 5-A A. Tooke, open tubing, ¼ hr. 16
Texas Co.'s No. 17 T. W. Lee, open tubing 91
Tide Water Oil Co.'s No. 5 C. C. Clemmens, open tubing, ½ hr. 16
Woodley Pet. Co. et al's No. 3 Hays, open tubing 140
Woodley Pet. Co. et al's No. 4 M. Hays, open tubing 35
Atlantic Oil Producing Co.'s No. 7 W. Smith, open tubing, ¼ hr. 45
Burke Royalty Co.'s No. 3-B Donnie Carr, open tubing 80
Cranfill & Reynolds' No. 3 Howard, open tubing 86
Gulf Prod. Co.'s No. 17 H. C. Alexander, open tubing 67
Gulf Prod. Co.'s No. 8 S. Davis, open tubing, 40 min. 41
Producers Investment Co.'s No. 1 A. A. King, open tubing 60
A. D. Robinson's No. 1 Hilburn Estate, open tubing 75
Shell Pet. Corp.'s No. 8 P. M. Bates, tapered tubing, ½ hr. 21
Texas Co.'s No. 6 J. M. Dickson, open tubing 73
Atlantic Oil Producing Co.'s No. 10 T. W. Lee, open tubing 100
Bishop Corp.'s No. 4 A. J. Ritchie, open tubing, ½ hr. 54
Canadian Oil Co.'s No. 3 Whittaker, open tubing 80
East Texas Oil & Ref. Co.'s No. 8 Hindman-Guy, open tubing, ½ hr. 67
Fritz Oil Co.'s No. 3 Anderson, open tubing 100
Gulf Prod. Co.'s No. 42 Judge, open tubing 80
Heyser-Heard's No. 2 Hindman-Guy, open tubing 109
Kewanee Oil Co.'s No. 14 fee, open tubing 63
Lecher and Hubbard's No. 3-A A. Harley, open tubing 102
Magnolia Pet. Co.'s No. 3 W. E. Jones, open tubing 65
Magnolia Pet. Co.'s No. 11 W. E. Jones, open tubing 100
Miller and Lacy's No. 2 Nicholson .... abd
Reserve Pet. Co.'s No. 2 J. J. Tuttle, open tubing 120
Bennie Rousch's No. 1 Rodden, open tubing 65
Selby Oil & Gas Co.'s No. 20 Snavely heirs, 1-in. tubing, ½ hr. 58
Adams and Lyle's No. 6 Howard, open tubing 80
Atlantic Oil Producing Co.'s No. 8 R. E. Whaley, open tubing 125
Cal-Tex Oil Co.'s No. 5 L. D. Crim, open tubing, ½ hr. 45
Houston Oil Co.'s No. 6 M. B. Hughey, open tubing 150
Jones and O'Brien's No. 15 Hughey-Ross, open tubing 60
Rabbit Creek Oil Co.'s No. 2 Elder, open tubing 75
Rhoads Drilling Co.'s No. 7 Sabine River, open tubing, ½ hr. 50
Sinclair Prairie Oil Co.'s No. 33 M. T. Cole, open tubing 60
Sinclair Prairie Oil Co.'s No. 3-B A. A. King, open tubing, ¼ hr. 31
J. B. Sowell's No. 4 W. P. Luce, open tubing 75
Tide Water Oil Co.'s No. 20 M. B. Hughey, open tubing, 10 min. 10
Vise et al's No. 2-B Cumi-Wells, open tubing, ½ hr. 35
Adams and Lyles' No. 6 Taylor-Anderson, open tubing, ¼ hr. 20
Atlantic Oil Producing Co.'s No. 20-B Burnside, open tubing 75
Atlantic Oil Producing Co.'s No. 52 Judge, open tubing 75
Bay Oil Co.'s No. 5 Wheeler, 1-in. tubing choke 70
Continental Oil Co.'s No. 5 B. C. Todd.. 116
Cranfill & Reynolds' No. 6 Rembert, open tubing 85
East Texas Oil & Ref. Co.'s No. 6 Castleberry, ½ hr. 72
East Texas Oil & Ref. Co.'s No. 7 Tuttle, through tubing, ½ hr. 69
East Texas Oil & Ref. Co.'s No. 9 White, through tubing, ½ hr. 62
Gulf Prod. Co.'s No. 41 Judge, open tubing 70
Humble O. & R. Co.'s No. 15 H. M. Lawrence, open tubing, ¼ hr. 15
Humble O. & R. Co.'s No. 6 W. C. Mackey, ¾-in. tubing 35
Lecker and Hubbard's No. 4 McGrede, open tubing, ¼ hr. 38
Ranch Oil Co.'s No. 2 Johnson, open tubing 75
Stanolind Oil & Gas Co.'s No. 3 Jones, open tubing, ¼ hr. 18
Texas Co.'s No. 18 T. W. Lee, open tubing 92
Tide Water Oil Co.'s No. 22 Lake Devernia, open tubing, 10 min. 21
Twin Oil Co.'s No. 11 M. Bonner, open tubing 65
Woodley-Atlantic and Sun Oil Co.'s No. 6 M. Hays, open tubing 110
Atlantic Oil Producing Co.'s No. 8 W. Smith, open tubing 75
Canadian Oil Co.'s No. 5 Hilburn, through tubing 75
Everetts Oil Co.'s No. 2 C. E. Muckelroy, open tubing 89
Gulf Prod. Co.'s No. 32 A. Spear, through tubing 77
Sinclair Prairie Oil Co.'s No. 34 M. T. Cole, through tubing, ¼ hr. 20
Sinclair Prairie Oil Co.'s No. 35 M. T. Cole, per swabbing 57
Sinclair Prairie Oil Co.'s No. 32-B A. A. King, through tubing, ¼ hr. 30
Stroube and Stroube's No. 4 J. R. Beall, per day by heads 59
Sun Oil Co.'s No. 10 A. G. Morton, open tubing 40
Tide Water Oil Co.'s No. 14 Barton, open tubing, 10 min. 9
Yeager et al's No. 1 Howard, open tubing 80

Completions 102
Initial production 6946

RUSK COUNTY

Barnsdall Oil Co.'s No. 4 T. H. Gill, open tubing 82
Cordova-Union Oil Co.'s No. 3-C C. O. Christian, open tubing 65
East Texas Oil & Ref. Co.'s No. 3 Andy Givens, open tubing 90
Houston Oil Co.'s No. 6 W. J. Brightwell, open tubing, 20 min. 37
Luling Oil & Gas Co.'s No. 3-B B. W. Brightwell, open tubing 125
Whitley Purchasing Co.'s No. 3 Brock Estate, open tubing 75
Tide Water Oil Co.'s No. 7 Leverett, open tubing, ½ hr. 39
Sam K. Vierson's No. 3-A Andy Givens, open tubing 111
East Texas Oil & Ref. Co.'s No. 3 Currin Barksdale, open tubing, ¼ hr. ... 20
Everett Drilling Co.'s No. 2 Cole, open tubing 100
Falcon Oil Co.'s No. 8 Perkins, open tubing 75
Gulf Prod. Co.'s No. 6 Maxwell, open tubing 60
H. L. Hunt Prod. Co.'s No. 7-B Sue Hale, per day, pumping 27
H. L. Hunt Prod. Co.'s No. 11 C. Young, open tubing 75
Mid-Kansas Oil & Gas Co.'s No. 45 W. T. Grissom, open tubing 60
Mid-Kansas Oil & Gas Co.'s No. 18 S. H. Moores, open tubing 60
Tide Water Oil Co.'s No. 4 Glenn Pool, open tubing 80
Venable and McClanahan's No. 12 J. A. Birdwell, open tubing 90
Humble Oil & Ref. Co.'s No. 18 J. N. Peterson, ¾-in. tubing choke 96
C. L. McMahan's No. 6 S. S. Laird, open tubing 115
Magnolia Pet. Co.'s No. 10 C C. Still, open tubing 120
Manahan Oil Co.'s No. 3 Nat and Carlos Bean, ¾-in. tubing choke 75
Snowden & McSweeney's No. 11 R. H. Laird, open tubing 65
Tide Water Oil Co.'s No. 8 Leverett, open tubing, ¼ hr. 25
Upchurch and Allen's No. 3 W. J. Brightwell, open tubing, ½ hr. 40
Cullen Oil Co.'s No. 2 Giles, open tubing 50
East Shore Oil Co.'s No. 5 Fox, open tubing, ¼ hr. 45
East Texas Oil & Ref. Co.'s No. 3 Giles, open tubing 55
Gulf Prod. Co.'s No. 8 Murphy, open tubing 90
Humble Oil & Ref. Co.'s No. 26-A Kangerga, open tubing 51
Letwin and Lippett's No. 3 G. W. Eaton, open tubing 75
Mid-Kansas Oil & Gas Co.'s No. 38 M. M. Cross, 2-in. open tubing 66
Sinclair Prairie Oil Co.'s No. 37 Kinney, open tubing 143
Barnett Oil Co.'s No. 3 I.&G.N. R.R. open tubing, 40 min. 50
Bay Oil Co.'s No. 7 D. M. Peterson, 1-in. tubing choke 125
Navarro Oil Co.'s No. 4 J. N. Peterson, open tubing, ¼ hr. 18
Sun Oil Co.'s No. 11 J. R. Beall, open tubing 74
Crabtree et al's No. 4 Giles, open tubing 100
Cullen Oil Co.'s No. 1 Giles, open tubing 60
H. L. Hunt Prod. Co.'s No. 5-C Joe Lee, open tubing, ¼ hr. 57
Hunt Prod. Co.'s No. 10-A Maxwell, open tubing, 27 min. 60
Hunt Prod. Co.'s No. 6 Vinson, open tubing, 25 min. 55
E.W. and F.D. Jones' No. 4 W. P. Moore, open tubing 80
George B. McCamey's No. 2 J. Minchew, open tubing 72
Superior Oil Co.'s No. 4 J. P. Cansler, open tubing 65
Mid-Kansas Oil & Gas Co.'s No. 12 M. C. DeGuerin, 2-inch lead 100
Mid-Kansas Oil & Gas Co.'s No. 40 T. Grissom, 2-in. lead 76
Mid-Kansas Oil & Gas Co.'s No. 14 S. H. Moores, 2-in. lead 68
Tex-Jersey Oil Co.'s No. 4-A W. P. Keeling, open tubing, ¼ hr. 40
Barnett et al's No. 2 I.&G.N. R.R., ¾-in. tubing choke 75
Devonian Oil Co. et al's No. 5 W. P. Moore, open tubing, 5 min. 8
Devonian Oil Co. et al's No. 6 W. P. Moore, open tubing, 5 min. 10
Hammond Oil Co.'s No. 3 Alexander, open tubing 60
Sam K. Vierson's No. 2 Jernigan, 1-in. tubing choke 117
Blackwell Oil & Gas Co.'s No. 8 Stone, open tubing, ½ hr. 30
Bristol-Duncan-White's No. 1 Womack open tubing 80
East Texas Ref. Co.'s No. 3-B W. W. Holland, open tubing, ½ hr. 35
H. L. Hunt Prod. Co.'s No. 3 B. F. Maxwell, open tubing, ¼ hr. 27
Mid-Kansas Oil & Gas Co.'s No. 39 M. M. Cross, 2-in. lead 102
Stanolind Oil & Gas Co.'s No. 41 W. H. Slier, 2-in. open tubing, 20 min. 21
Stroube & Stroube's No. 2 R. O. Russell, open tubing, 50 min. 50

Wells completed 61
Initial production 4097

SMITH COUNTY

H. L. Hunt Prod. Co.'s No. 11-A R. W. Fair, open tubing, 45 min. 68
Texas Co.'s No. 10 Blackwell, open tubing 60
British American Oil Co.'s No. 5 M. L. Thompson, open tubing 75
Hunt Prod. Co.'s No. 6-B R. W. Fair, open tubing, ½ hr. 62
Reed et al's No. 2 T. O. Wright, open tubing 90
Texarkana Oil Co.'s No. 2 S. S. Cook, open tubing 100
Magnolia Pet. Co.'s No. 9 J. R. Wright, open tubing 65
Sinclair Prairie Oil Co.'s No. 21 A. S. Jarvis, open tubing, ¼ hr. 18
Sinclair Prairie Oil Co.'s No. 18-C A. S. Jarvis, open tubing, ¼ hr. 36
Texas Co.'s No. 9 Blackwell, open tubing 80
Mid-Kansas Oil & Gas Co.'s No. 29 J. H. Sharp 56
Sinclair Prairie Oil Co.'s No. 20-A A. S. Jarvis, open tubing, ¼ hr. 15
Sinclair Prairie Oil Co.'s No. 22-A A. S. Jarvis, open tubing, ¼ hr. 42
Sinclair Prairie Oil Co.'s No. 19-C A. S. Jarvis, open tubing, ¼ hr. 31
Sinclair Prairie Oil Co.'s No. 20-C A. S. Jarvis, open tubing, ¼ hr. 45
Sinclair Prairie Oil Co.'s No. 23-A Mayfield, open tubing, ¼ hr. 35
Sinclair Prairie Oil Co.'s No. 24-A Mayfield, open tubing, ¼ hr. 26
Sinclair Prairie Oil Co.'s No. 14 D. Wright, open tubing, ¼ hr. 35
Sinclair Prairie Oil Co.'s No. 9 R. G. Wright, open tubing, ¼ hr. 35

Wells completed 19
Initial production 974

UPSHUR COUNTY

Perrin and Fell's No. 3 Wm. Landers, open tubing, 20 min. 40
Rancho Oil Co.'s No. 5 Moyer, open tubing 90
Twin Oil Co.'s No. 8 Bonner, open tubing 57
Conservative Oil Co.'s No. 7 Victory, tubing 85
Mudge Oil Co.'s No. 3 Bland, open tubing 75
Paul Pewitt's No. 1 A. J. Sanders, open tubing 75
Roeser & Pendleton's No. 5-A Satterwhite, open tubing 85
Steen Drilling Co.'s No. 7 Loden, open tubing 75
Humble Oil & Ref. Co.'s No. 9 G. W. G. W. Johnson, ¾-in. tubing 45
Peckham & Meadows' No. 1 L. P. League, open tubing 65
B. F. Phillips' No. 2-B L. P. League, 2-in. tubing 100

Wells completed 11
Initial production 792

VAN ZANDT COUNTY

C. O. Weir's No. 1 W. B. Tunnell ..... abd
Pure Oil Co.'s No. 4 J. H. Leonard 50
H. C. Teague et al's No. 1 Morris ..... abd

Wells completed 3
Initial production 50
Abandoned 2

North Central Texas Fields

Summary of Wells Completed

County—	Comp.	Prod.	Abd.	Gas
Archer	15	387	8	0
Brown	6	237	2	0
Callahan	3	0	2	1
Coleman	2	0	1	1
Cooke	1	10	0	0
Comanche	1	0	1	0
Clay	2	0	2	0
Denton	1	0	1	0
Foard	1	750	0	0
Eastland	1	0	1	0
Erath	1	0	1	0
Grayson	1	0	1	0
Jack	3	10	2	0
Palo Pinto	5	0	2	3
Shackelford	6	270	3	0
Throckmorton	1	0	1	0
Wichita	9	125	5	0
Wilbarger	5	54	4	0
Young	17	487	3	0
Total August	81	2,330	45	5
Total July	78	2,004	46	1
Difference	3	326	1	4

Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl.
Archer	14	7	20	41
Brown	2	1	8	11
Callahan	1	4	5	10
Clay	1	1	3	5
Coleman	2	2	3	7
Cooke	0	3	1	4
Eastland	1	2	1	4
Erath	0	1	0	1
Foard	0	0	1	1
Grayson	0	3	0	3
Jack	1	3	2	6
Johnson	0	2	0	2
Montague	1	0	2	3
Palo Pinto	2	5	4	11
Parker	0	2	0	2
Shackelford	4	2	5	11
Stephens	0	1	0	1
Taylor	1	0	2	3
Tarrant	0	2	0	2
Throckmorton	1	2	1	4
Wichita	2	2	4	8
Wilbarger	4	2	3	9
Wise	0	2	0	2
Young	6	4	23	33
Total August	43	53	88	184
Total July	36	53	73	162
Difference	7	0	15	22

WELLS COMPLETED

ARCHER COUNTY

J. A. Coleman, No. 1 Prideaux 15
W. B. Hamilton, No. 2 Abercrombie .. abd
Jesse Lincoln, No. 3 Ray 55
W. E. Maxson, No. 2 F. C. Green 10
Norwood and Brashear, No. 1 Davis .. abd
Rancho Oil Co., No. 3 Prideaux (recompleted) 17
J. C. Roby, No. 1 Peters ..... abd
Shappell Oil Co., No. 7 Portwood ..... abd
Bridwell Oil Co., No. 14 Oil Investment Co. ..... abd
Fain & McGaha Corp., No. 4 Fain & McGaha 150
A Kress, No. 2 May Rutty ..... abd
Achnig et al, No. 1 Anderson ..... abd
Helena Oil & Gas Co., No. 3 Ray 125
King and Krahenbuhl, No. 1 Tarr .... abd
Perkins and Cullum, No. 2 Abercrombie 15

Completions 15
Initial production 387
Abandoned 8

BROWN COUNTY

Charter Oil Co., No. 1 C. H. and A. C. Reeves 100
R. C. McCarter, No. 1-A Leatherwood.. abd
Petroleum Interest, No. 24 J. W. Newton ..... abd
Texas Co., No. 89 Lowe 2
Petroleum Interest, Inc., No. 1 Mrs. T. S. Williams 10
S. B. Owens, No. 6 Lynch 125

Completions 6
Initial production 237
Abandoned 2

CALLAHAN COUNTY

Hayek Oil Co., No. 1 Finley ..... gas
C. B. Holmes, No. 1 J. N. Jackson .... abd
Sweeney et al, No. 1 Finley ..... abd

Completions 3
Gas well 1
Abandoned 2

COLEMAN COUNTY

Centennial Oil & Gas Co., No. 1 W. D. Allen ..... gas
Canyon Oil & Gas Co., No. 2 Keller ... abd

Completions 2
Abandoned 1
Gas well 1

COOKE COUNTY

W. F. Russell, No. 1 T. E. McFadden.. 10

Completions 1
Initial production 10

COMANCHE COUNTY

E. P. Knott et al, No. 1 Scott and Utterback ..... abd

Completions 1
Abandoned 1

CLAY COUNTY

Lawson Oil & Gas Co., No. 1 Henderson abd
Joe Brady, No. 1 H. C. Dean ..... abd

Completions 2
Abandoned 2

DENTON COUNTY

W. D. Gray, No. 1 Montgomery ..... abd

Completions 1
Abandoned 1

FOARD COUNTY

Texas Co., No. 3 Johnson 750

Completions 1
Initial production 750

EASTLAND COUNTY

Ed Klough, No. 1 M. Newman ..... abd

Completions 1
Abandoned 1

ERATH COUNTY

Thoms. K. O'Neal et al, No. 1 H. L. Kiker ..... abd

Completions 1
Abandoned 1

GRAYSON COUNTY

Barton and Combest, No. 1 Chiles .... abd

Completions 1
Abandoned 1

JACK COUNTY

Texas Plains Oil Co., No. 1 Terrell ..... abd
C. W. Baller et al, No. 5 Clay 10
F. W. Brodie, No. 2 Hunt ..... abd

Completions 3
Initial production 10
Abandoned 2

PALO PINTO COUNTY

O. P. Coffman, No. 1 Joe Hatfield ..... gas
Brazos River Gas Co., No. 7 Sleight... abd
States Oil Corp., No. 3 Allen-Ritchie .. gas
O. P. Coffin, No. 1 R. T. Goen ..... abd
L. C. Owens, No. 1 Hattie Stages ..... gas

Completions 5
Gas wells 3
Abandoned 2

SHACKELFORD COUNTY

Banner et al, No. 1 J. H. Nail ..... abd
A. E. Bessey, No. 1 M. C. Taylor ..... abd
Freeman et al, No. 4 Morris-Buie 150
Pruitt et al, No. 1 Bran ..... abd
Roeser and Pendleton, No. 6 Dawson.. 100
Gilman and McMurray, No. 2 Mathews. 20

Completions 6
Initial production 270
Abandoned 3

THROCKMORTON COUNTY

J. A. Bearman, No. 1-D Lee Tuton .... abd

Completions 1
Abandoned 1

WICHITA COUNTY

C. W. Clark, No. 3 Allen Kemp 27
W. M. Clark, No. 2 Overby 50
J. C. Clower, No. 17 George L. Dobie.. abd
G. W. Cooper et al, No. 1 Waggoner Bros. 30
Golding and Cochran, No. 4 Waggoner Bros. 6
George Proctor, No. 2 Honaker (re-completed) 12
United Producers Co., No. 18 Hodges... abd
United Producers Co., No. 5 Hodges ... abd
J. E. Jones, No. 6 Jennings ..... abd

Completions 9
Initial production 125
Abandoned 5

WILBARGER COUNTY
Barkley and Meadows ..... abd
Fain and McGaha, No. 6 Waggoner ... abd
L. C. Webb, No. 1 Waggoner 54
Fain and McGaha, No. 8 Waggoner ... abd
Fain and McGaha, No. 21 Waggoner ... abd

Completions 5
Initial production 54
Abandoned 4

YOUNG COUNTY
S. D. Glover, No. 1 Johnson 6
HY Oil Co., No. 8 Larimore 40
Iron Mountain Oil Co., No. 5 Swain ... 30
Lowe Farm Oil Co., No. 6 Lowe 75
Morgan and Watola, No. 2 Miller ..... abd
Petroleum Prod. Co., No. 1 Belknap ... abd
Pitzer and West, No. 3 James ..... abd
Sam and Watson, No. 4 Williams 18
Texas Plains Oil Co., No. 3 Garvey 75
Wheeler and Brashear, No. 1 Jeffery (recompleted) 8
D. L. Wolf, No. 4 Wolf ..... abd
Degener et al, No. 1 Johnston ..... abd
Bridwell Oil Co., No. 1 Culler ..... abd
HY Oil Co., No. 9 Larimore 60
Pitzer and West, No. 2 Williams 175
Texas Co., No. 2 Jeffery ..... abd
R. J. Watson, No. 1 Stringer ..... abd

Completions 17
Initial production 487
Abandoned 8

Southwest Texas Fields

Summary of Field Operations

Pools—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Cedar Creek.	1	0	1	0	0	1	1
Hilbig	2	2,688	0	0	0	0	0
N. Dale* ...	0	0	0	0	0	2	2
Tuleta	1	1,100	0	0	0	0	0
Pettus	0	0	0	0	0	1	1
Eckert	1	0	1	0	0	3	3
N. Gov. Wells	11	8,120	0	0	5	6	11
S. R. C.	0	0	0	0	1	0	1
N. Kohler*..	1	0	1	0	0	1	1
Palangano .	0	0	0	0	0	1	1
Sarnosa	4	2,600	1	0	1	1	2
N. Pettus ..	0	0	0	0	1	1	2
Jacob	2	70	1	0	0	3	3
Saxet	1	0	0	1	0	0	0
San Patricio	0	0	0	0	0	1	1
Cuevitas	1	0	1	0	0	1	1
Chapman ..	1	0	1	0	0	0	0
Laurel	4	20	2	1	0	0	0
Moca	3	220	1	0	0	0	0
Escobas	2	130	0	0	0	0	0
Jennings ...	0	0	0	0	0	1	1
Mirando Valley ...	1	0	1	0	0	0	0
Miscellaneous	34	0	33	1	17	92	109
Total Aug.	70	14,948	44	3	25	115	140
Total July	53	9,277	31	1	12	140	152
Difference	17	5,671	13	2	13	25	12

*North Dale formerly called Riddle. North Kohler formerly called Peters.

WELLS COMPLETED
CEDAR CREEK POOL—BASTROP COUNTY
Orgain, Marts & Beavens 1 ..... abd
HILBIG POOL—BASTROP COUNTY
Wilhelm, Humble Oil & Ref. Co. 7 1440
Wilhelm, Humble Oil & Ref. Co. 8 1248
TULETA POOL—BEE COUNTY
Rapp and Hatch, Grisham et al 1 1100
ECKERT POOL—BEXAR COUNTY
A. C. Gembler, McDaniel & Wood 1 .. abd
NORTH GOVERNMENT WELLS POOL—DUVAL COUNTY
Duval County Ranch Co., Reynosa Oil Corp. 1 2079
Duval County Ranch Co., Stewart-Parr 2 2400
Hahl, Humble O. & R. Co. 8 1200
Hahl, Humble O. & R. Co. 9 75
Hahl, Navarro Oil Co. 14 1080
Hahl, Navarro Oil Co. 20 100
Hahl, Navarro Oil Co. 27 60
Hahl, Reynosa Oil Corp. 8 840
Johnson, Texas Co. 8 120
Smith, C. G. Porter 2 75
Wendt, Southwest Drilling Co. 12 100
NORTH KOHLER POOL—DUVAL COUNTY
Sutherland, R. F. Duggan 1 ..... abd
SARNOSA POOL—DUVAL COUNTY
Cano (Cuellar), Sun Oil Co. 5 100
Duval County Ranch Co., L. W. Capps 5-A 100
Weil, Sarnosa Oil Corp. 10 ..... abd
Weil, Sarnosa Oil Corp. 15 2490
JACOB POOL—McMULLEN COUNTY
Lark, Longhorn Oil Co. 2 ..... abd
L. Jacob, Loma Oil Co. 14-A 70
SAXET POOL—NUECES COUNTY
F. E. Bliss, Southern Alkali Corp. 1 .. gas
CUEVITES POOL—STARR COUNTY
Guerra, Sun Oil Co. 1-B ..... abd
CHAPMAN POOL—WILLIAMSON COUNTY
M. V. Lawrence, Deep Pay Exp. Co. 1.. abd
LAUREL POOL—WEBB COUNTY
Jose Garcia, Magnolia Pet. Co. 1 ..... gas
Garcia-Villareal, E. A. Taegel 2 20
Laurel, South Texas 9 ..... abd
Villareal, Cole & Wise 4 ..... abd
MOCA POOL—WEBB COUNTY
Duval County Ranch Co., S. R. C. et al 2 20
Duval County Ranch Co., S. R. C. Oil Corp. 3 200
Duval County Ranch Co., Moca Oil Co. 5 ..... abd
ESCOBAS POOL—ZAPATA COUNTY
Measles, Texas Co. 24 50
Measles, Texas Co. 23 80
MIRANDO VALLEY POOL—ZAPATA COUNTY
R. Hinnsny, J. W. Edwards 1 ..... abd

Wells completed 23
Production 14,668
Tests abandoned 11
Gas production 10,000,000

Miscellaneous Counties
BASTROP COUNTY
Peter Gertz, Adams & Lyles 1 ..... abd
J. W. Mlear, Detroit Texas (M. O. Rayor) 1 ..... abd

BEXAR COUNTY
S. A. Irrigation Farms, Amsden & Foster 1 ..... abd
J. J. Appelt, R. S. Boling 1 ..... abd
Pruitt, Motes-Campbell 2 ..... abd
BLANCO COUNTY
Mier, C. L. McLeary 1 ..... abd
CALDWELL COUNTY
E. Rodenburg, Eddie Thomson 1 ..... abd
E. Rodenburg, Eddie Thomson 1-A .... abd
DUVAL COUNTY
R. Lopez, Clark & Miller 1 ..... abd
Parr, M. J. Coffey 1 ..... abd
Peal, G. G. Mortimer 1 ..... abd
GUADALUPE COUNTY
Rosenbrook, J. A. Harper 1 ..... abd
M. Hoffman, W. J. Walton 1 ..... abd
JIM HOGG COUNTY
Holbien, Seaton A. Barnes, Jr. 1 ..... abd
Thompson, Shankie et al 1 ..... abd
KARNES COUNTY
Rudd, Accumulative Royalty Co. 1 .... abd
S. Salge, Karnes Co. Dev. Co. 1 ..... abd
LA SALLE COUNTY
Mrs. T. A. Coleman, C. B. Bunte 1 .... abd
LIVE OAK COUNTY
A. J. Turner, Loma Oil Co. 1 ..... abd
Terrell, Whitfield 1 ..... abd
McMULLEN COUNTY
Sling, Darby Oil Co. 1 ..... abd
A. C. Miles, C. R. Pope, Inc. 1 ..... abd
Dickson Farm Mrtg. Co., Tarver & Nance 2 ..... abd
Jacob, Whitfield 1 ..... abd
STARR COUNTY
Starr Co. Cattle Co., Jeffries & Lambeth Drlg. Co. 1 ..... gas
UVALDE COUNTY
Kincaid, John Roberts 2 ..... abd
Kincaid, John Roberts 1 ..... abd
Riddle, O. A. Payte 1 ..... abd
H. M. Waldrip, O. A. Payte 1 ..... abd
WEBB COUNTY
W. W. Stell, Shankie and Roche 1 .... abd
WILLIAMSON COUNTY
Ritchey, R. S. Wilson 1 ..... abd
WILSON COUNTY
Joe Gutzeit, Sexton Pet. Co. 1 ..... abd
ZAPATA COUNTY
Pena, O. W. Killam 1 ..... abd
A. M. Bruni, O. W. Killam 2 ..... abd

Wells completed 34
Production 0
Tests abandoned 33
Gas production 25,000,000

West Texas Fields

Summary of Wells Completed

County—	Comp.	Prod.	Abd.	Gas
Concho	1	0	1	0
Fisher	2	1,800	0	0
Garza	1	0	1	0
Glasscock	1	50	0	0
Howard	5	615	1	0
Irion	1	200	0	0
Jones	2	200	1	0
Pecos	3	233	0	0
Reeves	1	0	1	0
Runnels	1	520	0	0
Ward	4	60	1	1
Winkler	1	70	0	0
Total Aug.	23	3,748	6	1
Total July	33	5,658	8	1
Difference	10	1,910	2	0

Summary of Rigs and Wells Drilling

County—	Rigs	S.D.	Dig.	Ttl
Brewster	0	1	0	1
Concho	0	1	2	3
Crane	0	0	1	1
Crockett	0	1	0	1
Dawson	0	1	0	1
Ector	2	1	4	7
Fisher	3	0	4	7
Glasscock	0	1	0	1
Howard	1	6	5	12
Irion	0	2	0	2
Jones	0	4	2	6
Loving	1	1	2	4
Pecos	4	4	6	14
Reagan	1	2	4	7
Reeves	0	0	1	1
Runnels	0	2	1	3
Scurry	0	4	0	4
Terrell	0	2	0	2
Upton	0	0	1	1
Ward	3	8	16	27
Winkler	1	2	5	8
Total Aug.	16	43	54	113
Total July	12	48	47	107
Difference	4	5	7	6

WELLS COMPLETED
CONCHO COUNTY
J. M. Simmons No. 1 Schultz ..... abd

Wells completed 1
Abandoned 1

FISHER COUNTY
Cranfill & Reynolds No. 2 George ... 800
Southern Oil Corp. No. 1 W. L. Beavers. 1000

Wells completed 2
Initial production 1,800

GARZA COUNTY
Southern Oil Corp.'s No. 1 Boren ..... abd

Wells completed 1
Abandoned 1

GLASSCOCK COUNTY
Tribal Oil Co. et al's No. 2 M. M. Edwards 50

Wells completed 1
Initial production 50

HOWARD COUNTY
Continental Oil Co.'s No. 11-A Settles.. 65
Ed S. Holman et al's No. 1 Kloh & Rumsey 492
L. C. Harrison's No. 4 L. C. Denman.. 40
S. L. Meyers' No. 1 L. C. Denman .... abd
Joe Rusk et al's No. 1 G. M. Dodge .. 18

Wells completed 5
Initial production 615
Abandoned 1

IRION COUNTY
P. A. Johnson's No. 1 H. J. Voelker.. 160

Wells completed 1
Initial production 200

JONES COUNTY
Clay-Lancaster, Inc.'s No. 1 Brewer ... 290
F. E. Shaheen's No. 1 Sandlin ..... abd

Wells completed 2
Initial production 200
Abandoned 1

PECOS COUNTY
McClure et al's No. 1 Pecos Valley 35
Kemper Kimberlin's No. 1 D. B. Gregg 50
A. & M. Pet. Corp.'s No. 3 University.. 148

Wells completed 3
Initial production 233

REEVES COUNTY
Merry Bros. and Perini's No. 1 H. H. Johnson et al ..... abd

Wells completed 1
Abandoned 1

RUNNELS COUNTY
B. C. Mann et al's No. 1 T. B. Wade... 520

Wells completed 1
Initial production 520

WARD COUNTY
Atlantic Oil & Prod. Co.'s No. 1 Jones. 20
Bradford's No. 1 Allen ..... gas
Atlantic Oil & Prod. Co.'s No. 2 T. H. Barrow ..... abd
Barnsdall Oil Co.'s No. 2 Jim Henry ... 40

Wells completed 4
Initial production 60
Gas 1
Abandoned 1

WINKLER COUNTY
Richardson et al's No. 2-A Scarborough 70

Wells completed 1
Initial production 70

Panhandle Fields

Summary of Wells Completed

County—	Comp.	Prod.	Abd.	Gas
Gray	10	2,299	0	0
Hutchinson	2	226	0	0
Wheeler	3	35	0	2
Total August	15	2,560	0	2
Total July	14	2,255	2	0
Difference	1	305	2	2

Rigs and Wells Drilling

County—	Rigs	S.D.	Drlg.	Ttl.
Carson	1	1	2	3
Childress	1	2	9	3
Gray	9	7	8	24
Hutchinson	3	1	4	8
Hemphill	0	1	0	1
Moore	0	1	2	3
Oldham	0	1	0	1
Roberts	0	1	0	1
Wheeler	1	1	5	7
Total August	15	15	21	51
Total July	14	12	22	48
Difference	1	3	1	3

WELLS COMPLETED
GRAY COUNTY
Denworth Oil Co.'s No. 1 Webb 105
Gulf Prod. Co.'s No. 3-A Catlin 631
Parton and Holt's No. 2 Morse 4
Phillips Pet. Co.'s No. 1 Wood (recompleted) 140
Phillips Pet. Co.'s No. 5 Wood (recompleted) 123
E. Warner's No. 1 Webb 680
Phillips Pet. Co.'s No. 1 Wright (recompleted) 140
Phillips Pet. Co.'s No. 5 Wright (recompleted) 125
Sinclair Prairie Oil Co.'s No. 2 Coomley 210
Texas Co.'s No. 7 Wright (recompleted) 241

Completions 10
Initial production 2299

HUTCHINSON COUNTY
Dixon Creek O. & R. Co.'s No. 1 Haile.. 100
E. W. Means' No. 1 Pond 126

Completions 2
Initial production 226

WHEELER COUNTY
Bell Oil & Gas Co.'s No. 1 Evans ..... gas
Martin and Dubose's No. 1 Grogan .... gas
Stuckeu Construction Co.'s No. 1 Koons 35

Completions 3
Initial production 35
Gas wells 2

East Texas Border Counties

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Cass	1	0	1	0	0	0	0
Bowie	0	0	0	0	0	1	1
Harrison ...	0	0	0	0	0	1	1
Marion	2	0	2	0	1	1	2
Panola	1	0	1	0	3	1	4
Red River ..	0	0	0	0	1	3	4
Shelby	0	0	0	0	1	4	5
Total Aug.	4	0	4	0	6	11	17
Total July	1	25	0	0	3	16	19
Difference.	3	25	4	0	3	5	2

WELLS COMPLETED
CASS COUNTY
C. W. Morris Sur., S. A. Orr, T. H. Pardoe et al 1 ..... dry
MARION COUNTY
M. G. Noll Survey, R. W. Player, Dragon Oil Co. 1 ..... dry
H. Fulgram Sur., Miller, Baunoch Development Co. 1 ..... dry
PANOLA COUNTY
John Palmer Sur., Rucks, Daisy Oil & Gas Co. 1 ..... dry

Gulf Coast Fields

Texas

Summary of Field Operations for August

Field—	Comp.	Prod.	Abd.	Gas	Rigs	Drg.	Ttl.
Ariola	0	0	0	0	0	1	1
Barbers Hills	7	6,468	0	0	2	12	14
Batson	0	0	0	0	0	1	1
Big Creek ..	0	0	0	0	0	1	1
Buckeye	0	0	0	0	0	3	3
Conroe	41	53,248	2	2	20	34	54
Damon Md..	0	0	0	0	0	2	2
Esperson ...	0	0	0	0	0	2	2
Fannett	1	663	0	0	1	2	3
Fox	1	480	0	0	0	0	0
Goose Creek.	1	15	0	0	0	2	2
Garwood ...	1	0	1	0	0	1	1
Greta	10	6,242	3	0	13	22	35
Hankamer .	0	0	0	0	0	1	1
High Island.	0	0	0	0	0	5	5
Hockley	0	0	0	0	0	1	1
Hull	0	0	0	0	0	5	5
Humble	1	395	0	0	1	1	2
Livingston .	3	555	1	0	0	3	3
Louise	0	0	0	0	4	5	9
Lost Lake ..	1	0	1	0	0	0	0
Manvel	0	0	0	0	0	3	3
Mykawa	2	800	0	0	0	1	1
No. Dayton .	0	0	0	0	0	1	1
O'Conner ...	1	0	1	0	0	0	0
Orchard	1	1,160	0	0	0	0	0
Pierce Jct. .	0	0	0	0	0	1	1
Port Neches.	0	0	0	0	1	1	2
Refugio	5	415	0	1	0	0	0
Saratoga	3	61	0	0	2	2	4
Stratton Rdg.	1	0	1	0	0	0	0
Thompson ..	8	11,040	0	0	0	6	6
Tomball	5	690	0	3	2	3	5
W. Columbia	1	20	0	0	0	0	0
Miscellaneous	14	0	14	0	18	37	55
Total Aug..	107	82,252	24	6	64	159	222
Total July.	106	108,206	22	2	16	143	159
Difference.	1	25,946	2	4	48	16	72

Louisiana

Field—	Comp.	Prod.	Abd.	Gas	Rigs	Drg.	Ttl.
Black Bayou	1	838	0	0	0	0	0
Choctaw	0	0	0	0	1	1	2
Darrow	1	0	1	0	0	0	0
Dog Lake ..	1	0	1	0	0	0	0
Hackberry (East) ...	2	0	2	0	1	3	4
Hackberry (Old)	1	0	1	0	0	0	0
Gueydan	1	575	0	0	1	2	3
Iowa	1	0	1	0	2	6	8
Jennings ...	1	0	1	0	0	1	1
Lake Barre .	1	0	1	0	0	0	0
Lake Wash..	3	0	3	0	0	0	0
Lockport ...	2	950	0	0	1	0	1
Port Barre ..	1	294	0	0	2	0	2
Sulphur	0	0	0	0	0	5	5
Vinton	1	1,013	0	0	2	2	4
Miscellaneous	8	2,292	7	0	3	19	22
Total Aug..	25	5,962	18	0	13	39	52
Total July.	22	8,490	12	0	2	39	41
Difference.	3	2,528	6	0	11	0	11

Gulf Coast

Total Aug....	132	88,214	48	6	77	198	275
Total July...	128	116,696	34	2	18	182	200
Difference	4	23,456	8	4	59	16	75

TEXAS

WELLS COMPLETED
BARBERS HILL—CHAMBERS COUNTY
Kirby, Mills Bennett Prod. Co. 4 523
Wilburn, Mills Bennett Prod. Co. 5.....2122
Wilburn, McAlbert Oil Co. 5 1000
Wilburn, Sinclair Prairie Oil Co. 14..... 10
Wilburn, Texas Co. 8 900
Kirby, Texas Co. 3 1373
Chambers County, Yount Lee Oil Co. 20 540

Wells completed 7
Production 6468
Abandoned or gas 0

CONROE—MONTGOMERY COUNTY
Keystone Mills, Alpha Oil Co. 8 576
Keystone Mills, Alpha Oil Co. 9 504
Krohn, Alpha Pet. Co. 1 1560
Smith & Ratcliff, Bishop Oil Corp. 2 ..2088
Keystone Mills, Feltex Oil Co. 3 161
Bertrand, Gulf Coast Drlg. & Prod. Co. 2 1152
Keystone Mills, Gulf Coast Drlg. & Prod. Co. 11 424
Keystone Mills, Gulf Coast Drlg. & Prod. Co. 13 575
Lewellen, Hamill & Smith 1 ..... abd
Massey, Harrison & Abercrombie 3 2304
Massey, Harrison & Abercrombie 8 1800
Moore, Houston Oil Co. 4 720
Dobbins, Humble Oil & Ref. Co. 8 1320
Easterly, Humble Oil & Ref. Co. 1 .... gas
Emory, Humble Oil & Ref. Co. 6 1006
Emory, Humble Oil & Ref. Co. 8 838
Hirsch, Humble Oil & Ref. Co. 5-B 1896
Madeley, Humble Oil & Ref. Co. 13 1808
L. B. McComb, Humble Oil & Ref. Co. 6.2088
Moore, Humble Oil & Ref. Co. 29 2280
Moore, Humble Oil & Ref. Co. 40 1128
Moorehead, Humble Oil & Ref. Co. 3...1776
Roger, Humble Oil & Ref. Co. 1 ..... gas
So. Texas Dev. Co., Tide Water Oil Co. 8 1920
So. Texas Dev. Co., Humble Oil & Ref. Co. 36-A 1588
So. Texas Dev. Co., Humble Oil & Ref. Co. 37-A 2088
So. Texas Dev. Co., Humble Oil & Ref. Co. 4-B 1968
So. Texas Dev. Co., Humble Oil & Ref. Co. 8-B 2040
Wiggins & Athey, Humble Oil & Ref. Co. 5 1128
Woodson, Humble Oil & Ref. Co. 1 1560
Krohn, Mortex Oil Corp. 1 648
Dudley, Republic Prod. Co. 1 ..... abd
Dunn, Showers & Moncrief 2-B 1800
Hooper, R. D. Simonton, rec., 1 2160
Jones, Sun Oil Co. 4 1104
Foster, Sun Oil Co. 6 1824
Foster, Sun Oil Co. 10 1008
Stewart, Sun Oil Co. 6-A 1872

Rhodes, Texas Co. 14-A 1812
Krohn, Tide Water Oil Co. 7 1250
Lewis, Tide Water Oil Co. 23 2424

Wells completed 41
Production 53,248
Abandoned 2
Gas 2
Gas production 7,250,000

FANNETT—JEFFERSON COUNTY
Junker, Gulf Prod. Co. 2-A 663

Wells completed 1
Production 663

FOX—REFUGIO COUNTY
Lambert, United Prod. Co. 1 480

Wells completed 1
Production 480

GOOSE CREEK—HARRIS COUNTY
Scott, Kerr & Dyer 2 15

Wells completed 1
Production 15

GRETA—REFUGIO COUNTY
O'Brien, Alamo Oil Co. 2 1240
Welder, Atkins & O'Neil 1 ..... abd
J. M. O'Brien, Blanco Oil Co. 1 890
J. M. O'Brien, Blanco Oil Co. 1-B 754
J. M. O'Brien, Dash Prod. Co. 1 888
J. M. O'Brien, Greta Oil Corp. 2 ..... abd
O'Brien, Heyser & Heard 1 735
O'Brien, Edwin M. Jones 1 845
O'Brien, Southwest Oil Corp. 1-B 980
Welder, Vidauri Oil Co. 1 ..... abd

Wells completed 10
Production 6242
Abandoned 3

HUMBLE—HARRIS COUNTY
Stevenson, Texas Co. 24 1

Wells completed 1
Production 395

LIVINGSTON—POLK COUNTY
Allen & Hibarger, Polk County Oil Corp. 2 555
Harwood, J. Z. Werby 1 ..... abd

Wells completed 2
Production 555
Abandoned 1

LOST LAKE—CHAMBERS COUNTY
Mayes, Pure Oil Co. 18 ..... abd

Wells completed 1
Abandoned 1

McFADDIN—REFUGIO COUNTY
O'Conner, Humble Oil & Ref. Co. 7 .... abd

MYKAWA—HARRIS COUNTY
Minneten, Crown-Framer Oil Corp. 2 .. 400
Irwin, Frederick & Coffelt 1 400

Wells completed 2
Production 800

ORCHARD—FORT BEND COUNTY
Moore, Gulf Prod. Co. 36 1160

Wells completed 1
Production 1160

REFUGIO—REFUGIO COUNTY
Powers, Cody & Wheeler 1 20
O'Conner, Moody-Seagraves Co. 3 25
O'Conner, United Prod. Co. 3 300
Fox heirs, United Prod. Co. 3 ..... gas
Mitchell, United Prod. Co. 5 60

Wells completed 5
Production 415
Gas 1
Gas production 20,000,000

SARATOGA—HARDIN COUNTY
Petty, Paggi Bros. 1 5
A. Jordit, Rio Bravo Oil Co. 100 41
Jordit, Rio Bravo Oil Co. 101 15

Wells completed 3
Production 61

THOMPSON—FORT BEND COUNTY
Gubbels, Gulf Prod. Co. 4-A 1329
Gubbels, Gulf Prod. Co. 5-A 960
T. R. Booth, Humble Oil & Ref. Co. and Gulf Prod. Co. No. 10 1224
H. P. Lockwood, Humble Oil & Ref. Co. and Gulf Prod. Co. 15 1224
Lockwood & Sharp, Humble Oil & Ref. Co. and Gulf Prod. Co. 20 1272
Lockwood & Sharp, Humble and Gulf 12-B 1392
Meyers, Humble Oil & Ref. Co. and Gulf Prod. Co. 9 1536
Mays, Wes-Len Oil Co. 1 2112

Wells completed 8
Production 11,040

TOMBALL—HARRIS COUNTY
Agnes Theis, Continental Oil Co. 1 360
Rudel, Magnolia Pet. Co. 1 ..... gas
Amiel Doege, Humble Oil & Ref. Co. 1. gas
Herbert Reid, Humble Oil & Ref. Co. 1. gas
Emil Schultz, Humble Oil & Ref. Co. 1. 330

Wells completed 5
Production 690
Gas 2
Gas production 6,800,000

WEST COLUMBIA—BRAZORIA COUNTY
Abrams, Texas Co. 11 20

STRATTON RIDGE—BRAZORIA COUNTY
Tolar & Dannenbaum, Currie Oil Co. 2. abd

GARWOOD—COLORADO COUNTY
O. M. Powell, Humble Oil & Ref. 1-B .. abd

MISCELLANEOUS TEXAS

COLORADO COUNTY
Lake Side Irrigation, Hughes-Patrick Oil Co. 1 ..... abd
Kansteiner, McCullough Oil Co. 1 ..... abd
H. T. Brandt, Weimar Oil Co. 1 ..... abd

Wells completed 3
Abandoned 3

HARRIS COUNTY
W. E. Freeman, Gohlson & Parsons 1.. abd
Clara W. Walker, Hamill Drlg. Co. 1.. abd
Woodburn, Jack Schultz et al 1 ..... abd

Wells completed 3
Abandoned 3

JACKSON COUNTY
I. N. Mitchell, Texas Co. 1 ..... abd

JEFFERSON COUNTY
C. A. Mashman, Caroll & Miller 1 .... abd
J. O. Young, Coastal Oil & Gas Co. 1 .. abd
Broussard, Elam & Pipkin 2 ..... abd
V. T. Rorck, W. J. Parker 1 ..... abd

Wells completed 4
Abandoned 4

MONTGOMERY COUNTY
Foster Lbr. Co., Fostoria Oil Co. 1 .... abd
Rohlf, Showers & Moncrief 1 ..... abd

Wells completed 2
Abandoned 2

WALKER COUNTY
Thompson Lbr. Co., Hart Oil Co. 1 ..... abd

SOUTH LOUISIANA

BLACK BAYOU—CAMERON PARISH
Watkins, Shell Pet. Corp. 15 838

DARROW—ASCENSION PARISH
Community lease, Rio Bravo Oil Co. 1. abd

DOG LAKE—TERREBONNE PARISH
State Dog Lake, Texas Co. 5 ..... abd

GUEYDAN—VERMILLION PARISH
Alliance Trust Co., Pure Oil Co. 4 575

EAST HACKBERRY—CAMERON PARISH
Olivia, Wilfred LaHay 1 ..... abd
J. B. Duhon, Massert & Cruse 1 ..... abd

Wells completed 2
Abandoned 2

OLD HACKBERRY—CAMERON PARISH
Yount Lee, Pop Oil Co. 1 ..... abd

IOWA—CALCASIEU PARISH
Bowman, Magnolia Pet. Co. 1 ..... abd

LAKE BARRE—TERREBONNE PARISH
L.L.&E. Lake Barre, Texas Co. 7 1152

LAKE WASHINGTON—PLAQUEMINES PARISH
Cockrell-Moran, Humble O. & R. Co. 9. abd
Cockrell-Moran, Humble O. & R. Co. 11 abd
Cockrell-Moran, Humble O. & R. Co. 13 abd

Wells completed 3
Abandoned 3

LOCKPORT—CALCASIEU PARISH
Bayou D'Inde-State, Magnolia Pet. Co. 8 500
Martha Moss, Union Sulphur Co. 5 450

Wells completed 2
Production 950

PORT BARRE—PORT BARRE PARISH
Botney Bay, Texas Co. 16 294

VINTON—CALCASIEU PARISH
Wilson, Wilson-Broach 9 1013

MISCELLANEOUS LOUISIANA

ACADIA PARISH
Marsh Farm & Canal Co., Massert et al 1 ..... abd

BEAUREGARD PARISH
Long Bell Lbr. Co., Burnham & Johnson 1 ..... abd
J. E. Cockran, Herber & French 1 .... abd
Roberts, Trapp & Turnbull 1 ..... abd

Wells completed 3
Abandoned 3

CAMERON PARISH
School, Bertrand-Sutton Oil Co. 1 ..... abd

TERREBONNE PARISH
Bay Junop—State Taylor Bay, Sun Oil Co. 1 ..... abd
Caillou Island — State Caillou Island, Texas Co. 8 2292
Four Isle—State Land, The Texas Co. 1 abd

Wells completed 3
Production 2292
Abandoned 2

Louisiana Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	*Rigs	Drg.	Ttl.
Avoyelles ..	0		0	1	0	0	0
Beauregard..	0		0	0	0	1	1
Bienville ...	2		0	0	0	1	1
Bossier	2		0	1	1	1	6
Caddo	2		0	2	0	4	10
Caldwell ...	1		0	1	0	1	0
Catahoula ..	1		0	1	0	0	1
Claiborne ...	2		0	1	1	2	0
DeSoto	5		0	5	0	3	14
East Carroll	0		0	0	0	1	0
Grant	0		0	0	0	3	1
Jackson	0		0	0	0	0	1
Morehouse ..	1		0	0	1	0	5
Nachitoches	0		0	0	0	1	5
Ouachita ...	3		0	0	3	1	3
Rapides	1		0	1	0	3	1
Red River ..	0		0	0	0	0	2
Richland	0		0	0	0	0	1
Sabine	20	3,040	10	0	15	34	49
Tensas	0	0	0	0	0	0	1
Union	1	0	0	1	0	1	1
Vernon	0	0	0	0	0	3	3
Webster ...	0	0	0	0	0	2	2
Total Aug.	40	3,040	23	7	36	93	129
Total July	26	500	17	5	38	95	134
Difference	14	2,540	6	2	2	2	5

*Gas production: Bossier, 13,500,000 feet; Claiborne, 5,000,000 feet; Morehouse, 290,000 feet; Ouachita, 20,150,000 feet; Sabine, 10,000,000 feet; Union, 23,400,000 feet; total 72,250,000 feet.

WELLS COMPLETED

AVOYELLES PARISH
36-1n-5e Coco, Pine Prairie Oil Co. 1 (loc.) ..... abd
9-1s-3e Haas, Gary Prevenson 1 (drk.) abd

BOSSIER PARISH
19-19-12 Leonard, John T. Anderson 1.. dry
23-17-12 Ed Webb, United Gas Public Service Co. 1 ..... gas

Gas production 13,500,000

CADDO PARISH
9-18-16 P. A. Sharpe, Nick Barbare 2 . dry
3-18-16 P. A. Sharpe, Pyramid Oil & Gas Co. 1 ..... dry

CALDWELL PARISH
18-11-3e La. Central Lbr. Co., Terrell and Price 1 ..... dry

CLAIBORNE PARISH
31-20-5 Addie Durrett, United Gas Public Service Co. 1 ..... gas
13-21-5 Meadows, United Gas Public Service Co. 1 ..... dry

Gas production 5,000,000

CATAHOULA PARISH
2- 9-6 La. Central Lbr. Co., George Greer et al 1-B ..... dry

DESOTO PARISH
12-10-11 Boone, Coker et al 1 ..... dry
11-11-11 John Cole, George L. Pace 1.. dry
11-11-11 John Cole, George L. Pace 1-B dry
32-12-11 Naborton Oil & Gas Co., E. J. Stanberry 1 ..... dry
25-14-13 H. M. Means, A. F. Tarver 1.. dry

MOREHOUSE PARISH
12-20-4e Taylor Sandidge, United Gas Public Service Co. 2 ..... gas

Gas production 200,000

OUACHITA PARISH
4-18-4e Nelson, Inabnet & Pipes 1 ..... gas
2-19-3e Fee 132, United Gas Public Service Co. 1 ..... gas
1-19-3e U. S. Govt., United Gas Public Service Co. 2 ..... gas

Gas production 20,510,900

RAPIDES PARISH
30-3n-2w Long-Bell Lbr. Co., G. W. Hindman 1 ..... dry

SABINE PARISH
22- 9-13 Ryals, Nick Barbare 1 ..... dry
26- 8-12 Shull, J. W. Bettis et al 1 ... dry
15- 7-11 Andries, Bryant & Lucas 1 480
22- 9-13 Bowman-Hicks Lbr. Co., R. L. Gay 1 100
18- 9-13 H. A. Pugh et al, Helena Oil & Gas Co. 1 45
2-3n-12 J. J. Pressler, G. C. Hoff 1 (loc.) ..... abd
16- 5- 9 Peavy-Wilson Lbr. Co., G. W. Langley et al 1 ..... dry
30- 8-11 H. L. Grindratt, Magnolia Pet. Co. 1 800
24- 8-11 H. A. Cook, Ben Merritt et al 1 35
3- 7-11 DeLatin, H. C. Mauiding 1 400
12- 7-11 La. Long Leaf Lbr. Co., Mid-Cont. Crude Oil Pur. Co. 1.. dry
ing Co. 1 ..... dry
13- 4-12 Wyatt Lumber Co., J. F. Morrissey 1 ..... dry
15- 7-11 S. D. Ponder, E. F. Neely 1... dry
29- 8-11 La. Long Leaf Lbr. Co., Pelican Nat. Gas Co. 23 35
16- 7-11 Stille, Pugh-Hickman Drlg. Co. 1 ..... dry
30- 8-12 Woods, Pugh-Hickman Drlg Co. 1 (loc.) ..... abd
8- 7-11 Lilley, C. T. Ruffin 4 1000
4- 7-11 Turner, Ben F. Smith 5 ..... dry
13- 9-11 Frost Lbr. Co., Southland Drlg. Co. 1 ..... dry
24- 8-12 J. A. Greer, A. L. and E. J. Waller, Tr., 1 ..... dry
14- 7-11 Alford, J. C. Walton 1 100
20- 9-13 Graham, Windsor Oil Co. 1 .. 50

Wells completed 20
Production 3040
Dry 10
Gas production 10,000,000

UNION PARISH
7-20-4e Harrell, Nemours Corp. 2 ..... gas

Gas production 23,400,000

Mississippi Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	*Rigs	Drg.	Ttl.
Covington ..	0		0	0	0	2	2
Hinds	0		0	0	0	3	3
Jones	0		0	0	0	1	1
Lamar	0		0	0	1	1	2
Madison	0		0	0	0	1	1
Newton	1		0	1	0	1	0
Pearl River .	0		0	0	1	0	1
Rankin	1		0	0	1	3	3
Scott	0		0	0	0	0	1
Walthall	0		0	0	0	1	0
Warren	0		0	0	0	1	1
Webster	0		0	0	0	0	1
Wilkinson ..	0		0	0	0	0	1
Total Aug..	2		0	1	1	8	15
Total July.	4		0	2	2	3	15
Difference.	2		0	1	1	5	0

*Gas production: Rankin, 37,011,000 ft.

WELLS COMPLETED
NEWTON COUNTY
25-6n-11 K. D. Majurs, Bob Dalton et al 1 ..... dry

RANKIN COUNTY
1- 5-1e Love Petroleum Co., J. A. Alexander 1 ..... gas

Gas production 37,011,000

Arkansas Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Arkansas ..	0		0	0	0	1	0
Cleveland ..	1		0	1	0	0	0
Columbia ..	0		0	0	0	0	3
Desha	0		0	0	0	0	1
Hemstead ..	0		0	0	0	1	1
Jefferson ...	0		0	0	0	1	1
Lafayette ..	2		0	2	0	0	1
Little River.	0		0	0	0	0	1
Lonoke	0		0	0	0	1	0
Miller	0		0	0	0	0	9
Nevada	0		0	0	0	0	2
Ouachita	0		0	0	0	1	2
Poinsett	0		0	0	0	0	1
Sevier	1		0	1	0	0	0
Union	1		0	1	0	2	3
Yell	0		0	0	0	0	1
Total Aug.	5		0	5	0	7	26
Total July	9		0	9	0	8	27
Difference.	4		0	4	0	1	1

WELLS COMPLETED
CLEVELAND COUNTY
10-10-12 Bell, Crum & Stilwell 1 (rig). abd

LAFAYETTE COUNTY
25-19-24 Hanson, Paul G. Benedum 1 . dry
19-19-25 Red River Lbr. Co., Sam E. Wilson 1 ..... dry

MILLER COUNTY
9-15-27 Grace, J. T. Humphreys 1 .... dry
22-15-28 McCowan, Sorrell and Tidwell 1 dry

NEVADA COUNTY
23-10-22 Porter, George M. Lynch 1 (loc.) ..... abd

SEVIER COUNTY
15-10-29 W. A. Craig, R. E. Collins et al 1 ..... dry

UNION COUNTY
2-19-15 Snyder, E. R. Henderson 1 ... dry

Alabama Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Baldwin	0		0	0	0	1	1
Cullman	0		0	0	0	1	1
Escambia ...	0		0	0	0	1	1
Lamar	0		0	0	0	1	1
Total Aug..	0		0	0	0	4	4
Total July.	0		0	0	0	4	4
Difference.	0		0	0	0	0	0

Rocky Mountain Area

NEW MEXICO

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Bernalillo	0		0	0	0	1	1
Eddy	0		0	0	2	9	11
Lea	1	22,944	0	0	0	5	5
McKinley	0		0	0	0	0	7
San Juan	3	124	2	0	2	11	13
San Miguel ...	0		0	0	0	3	3
Santa Fe	0		0	0	0	3	3
Valencia	0		0	0	0	3	3
Miscellaneous .	0		0	0	0	1	12
Total Aug. .	4	23,068	2	0	6	54	60
Total July .	6	1,873	3	0	10	46	56
Difference ..	2	21,195	1	0	4	8	4

WELLS COMPLETED

2-29-19	Continental Oil Co. 31	124
21-29-11	Bergin, McCoy — Phillips 1..	dry
18-21-13	Gov't, R. R. Burke 1	dry
20-18-33	McKinley, Shell Pet. Corp. 4-B	22,944

Wells completed 4
Production 23,068
Dry and abandoned 2

COLORADO

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Boulder	0		0	0	0	4	4
Elbert	0		0	0	0	4	4
Fremont	0		0	0	0	2	2
Jackson	0		0	0	0	5	5
Larimer* ...	1		0	1	0	4	4
Las Animas ..	1		0	1	0	0	1
Moffat	0		0	0	0	1	6
Montezuma	0		0	0	0	0	2
Morgan	0		0	0	0	1	1
Routt	0		0	0	0	2	1
Weld	1		0	1	0	0	2
Miscellaneous .	0		0	0	0	1	16
Total Aug. .	3		0	3	0	5	48
Total July .	2		0	1	1	4	58
Difference ..	1		0	2	1	1	10

*Four wells inactive for more than a year dropped.

WELLS COMPLETED

2-4n-70	Kistler, Art Deininger et al 1	dry
29-24-68	Maxwell, Continental Oil Co. 1	dry
14-1n-66	Smith, W. H. Gill et al 2 ...	dry

Wells completed 3
Dry and abandoned 3

MONTANA

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Carbon	0		0	0	0	5	5
Glacier	7	336	0	1	3	13	16
Liberty	1	18	0	0	0	3	3
Teton	0		0	0	0	3	3
Toole	0		0	0	0	6	6
Miscellaneous .	0		0	0	1	11	12
Total Aug. .	8	354	0	1	4	41	45
Total July .	5	1,200	0	0	7	41	48
Difference ..	3	846	0	1	3	0	3

WELLS COMPLETED

26-27-4e	Hicks, Western Natural Gas, 2	18
18-34-5w	Hope, R. C. Tarrant, 1.....	15
2-34-6w	Haines, Par Oil Co. 1.....	70
13-34-6w	Haglund, Jr., R. C. Tarrant, 2	25
23-34-6w	Britton, Hannah-Porter Co. 1..	30
16-34-6w	Haggerty, W. M. Fulton et al 1	106
31-35-5w	Brown, Mont. Pow. Gas Co. 1	Gas
14-34-6w	Matson, Dakota-Mont. O. Co. 1	90

Wells completed 8
Production 354
Gas 7,500,000

WYOMING

Summary of Field Operations

County—	Comp.	Prod.	Dry	Gas	Rigs	Drg.	Ttl.
Big Horn	1	10	0	0	2	4	6
Carbon	1		0	0	1	1	5
Converse	1		0	1	0	0	5
Crook	0		0	0	0	0	5
Fremont	1		0	0	1	0	5
Hot Springs ..	0		0	0	0	0	4
Natrona	0		0	0	0	2	6
Niobrara	0		0	0	0	0	3
Sweetwater ...	1		0	0	1	1	5
Sublet	0		0	0	0	0	5
Uinta	0		0	0	0	0	4
Washakie	0		0	0	0	0	4
Weston	3		18	1	0	2	7
Miscellaneous .	0		0	0	0	0	4
Total Aug. .	8		28	2	3	3	66
Total July .	10		30	5	3	11	67
Difference ..	2		2	3	0	3	1

WELLS COMPLETED

10-46-64	Lincoln Oil Synd. 1	dry

19-46-63 Wyoming Oil & Gas 19 8
21-46-63 Albert Jones 4 10
12-19-104 Cappers, Mountain Fuel Supply Co. 2 ..... gas
36-34-95 State-Ridgway, Texas Co. 3.. gas
32-31-72 R. J. Diiger et al 1 ..... abd
34-23-79 Hazlett, Ohio Oil Co. 1 ..... gas
20-52-93 Jones, Brown et al 1 10

Wells completed 8
Production 23
Gas 24,000,000

UTAH

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rigs	Drlg.	Ttl.
Total, Aug. .	0	0	0	0	1	17	18
Total, July .	0	0	0	0	1	17	18
Difference ..	0	0	0	0	0	0	0

Eastern Fields

Summary of Completed Work

Field—	Comp.	Prod.	Dry	Gas
Allegany	12	55	0	0
Bradford	95	148	0	0
Middle Field	4	10	0	0
Venango-Clarion	7	6	1	3
Butler-Armstrong	0	0	0	0
N. Y.-Pa. gas	10	0	4	6
S.W. Pennsylvania	3	15	1	1
S.E. Ohio	19	243	6	3
West Virginia	24	337	6	13
Total August	174	814	18	26
Total July	129	1,056	8	26
Difference	45	242	10	0

Summary of Work Under Way

Field—	Rigs	Drlg.	Ttl.
Allegany	1	6	7
Bradford	16	68	84
Middle Field	0	7	7
Venango-Clarion	0	8	8
Butler-Armstrong	1	4	5
N. Y.-Pa. gas	4	37	41
S. W. Pennsylvania	3	13	16
S.E. Ohio	9	20	29
West Virginia	25	57	82
Total August	59	220	279
Total July	50	184	234
Difference	9	36	45

WELLS COMPLETED

ALLEGANY

Stewart, Sepany Oil Co. 5
Fee, Jacob Meridan et al 3
Fee, Ryder Scott Co. 4
Fee, Ryder Scott Co. 7
Fee, N. V. V. Franchot 15
Fee, N. V. V. Franchot 10
Fee, C. M. Lippert et al 2
Fee, Ryder Scott Co. 4
Kinley, Pure Penn Oil, Inc. 2
Completions on Bradford Transit lines. 3

Completions 12
Production 55

BRADFORD

Fee, D. E. Quinlan estate 8
Fee, D. E. Quinlan estate 5
Rounds, J. W. Kaufman estate 10
Rounds, J. W. Kaufman estate 15
Hamlin, F. J. Elsert 5
Fee, George W. Smith estate 5
Completions on Bradford Transit lines. 53
Fee, Forest Oil Corp. (10 wells)....pressure
Fee, Niagara Oil Corp. 1
Fee, Niagara Oil Corp. (51 wells)..pressure
Fee Forest Pet. Corp. 1
Fee, Forest Pet. Corp. (6 wells)....pressure
Fee, Forest Dev. Corp. 1
Fee, Forest Dev. Corp. (2 wells)...pressure
380-81 Bingham, Rew Oil Co. 3
Bingham 541, Park and Bovaird 2
Bingham 464, R. S. Pringle .....pressure
Fee, Dallas Oil Co. .....pressure
Bingham 268, Brink and Brink 2
Bingham 423, James Evans et al 2
Corwin, Cora M. Simon 3
Corwin, Corwin and Gallagher 15
Fee, Devore Oil Co. 3
Booth, O. O. Lynn 3
Fee, Smith Oil Corp. .....pressure
Fee, Smith Oil Corp. .....pressure
Fee, M. Hungiville 3
Fee, M. Hungiville 3
Smith, Hillside Oil Co. .....pressure
Tracy, Wilson and Fitz 5

Completions 95
Production 148
Pressure 74

MIDDLE FIELD

Middaugh, A. L., and L. M. Lilly 2
Middaugh, A. L., and L. M. Lilly 3
Scio, Duke estate 2
Fee, Coast and Storms 3

Completions 4
Production 10

VENANGO-CLARION

Strong, J. W. Osenider 23 1
Coast, J. D., and C. D. Berry 29 2
Lorah, Edenburg Oil & Gas Co. 1 ..... gas
Wilson, Shorts Gas Co. 1 ..... gas
Henry, Dr. I. Dana Kahle 3 3
Fee, Fryburg Motor Co. 6 ..... dry
Fee, Fryburg Motor Co. 7 ..... gas

Completions 7
Production 6
Gas 3
Dry 1

BUTLER-ARMSTRONG

No completions.

N. Y.-PA. GAS

Slaight, Pa. Natural Gas Co. ..... dry
N. Y. C. Ry., Great Northern Gas Co. .. gas
Angel, Bingham et al ..... dry
Ridley, Glen Dearth et al ..... gas
Slaight, Hanley and Bird ..... dry
Estes, Electro Geometer Co. ..... gas
Wilcox, Sylvania Corp. ..... gas
Bowyer, Door Martin et al ..... gas
Kipp, Carl Finger et al ..... dry
Welch, Peterman et al ..... gas

Completions 10
Dry 4
Gas 6

SOUTHEAST OHIO

WELLS COMPLETED

ATHENS COUNTY

Sunday Creek Coal Co., Ohio Fuel Gas Co. 1 ..... dry

BELMONT COUNTY

McLaughlin, F. S. King et al 1 1
Lorain C. & D. Co., Peters & Patterson 1 ..... dry
Carroll & Eberts, Steuben Oil Co. 1 .. dry

COLUMBIANA COUNTY

Fowler, Syndicate 1 ..... gas

COSHOCTON COUNTY

Harris, Preston Oil Co. 1 10
Patterson, Wiser Oil Co. 1 75
Haun, Mehowa Oil Co. 1 35

HOCKING COUNTY

Sunday Creek Coal Co., Ohio Fuel Gas Co. 5,721 89

LICKING COUNTY

Smith, Dobenspect, Golden & Wintz 1.. dry
Hughes, C. R. and G. W. Settles 1 7

MEDINA COUNTY

Severcool, Kolb & McGrath 4 10
Ross, Oko O. & G. Co. 40 5
Severcool, Kolb & McGrath 1 10

MEIGS COUNTY

County Infirmary, P. & G. Oil & Gas Co. 1 ..... gas

MONROE COUNTY

Quigley, Sutherland O. & G. Co. 1 .... gas

MORGAN COUNTY

Massey, George B. Hazlett 1 ..... dry

NOBLE COUNTY

Neptune, Harper Bros. 1 ..... dry

WASHINGTON COUNTY

Rowland, R. W. Turner et al 3 1

WEST VIRGINIA

WELLS COMPLETED

CABELL COUNTY

Hager, Graham Gas Co. 1 ..... gas
Enslow, Ross Campbell 1 ..... gas
Tubert, Swanson & Martin 1 ..... gas

CALHOUN COUNTY

Beall & Wilson, E. B. Scott 1 ..... gas
White, Poling & Molahan 1 ..... gas
Starcher, Rockdale O. & G. Co. 1 .... gas
Chenowith & Edman, Starcher & Richards 1 ..... gas
Elder, Ira Haught et al 3 ..... gas

PLEASANTS COUNTY

Campbell, Kelchap Co. and M. Kelley 1 1
Ruckman, Julius Goebel 1 ..... dry

MONONGALIA COUNTY

Coomba, Kane Gas & Plumbing Co. 1.. dry

RITCHIE COUNTY

Riddle, A. H. Jackson 1 ..... gas
Riddle, A. H. Jackson 2 ..... gas
Allen, King Knob Oil Co. 1 ..... dry
Boehm & Neeley, Frank Finley et al 3. 240
Robinson, Hinton Farm Oil Co. 3 60
Armick, H. B. Smith et al 1 ..... dry
Hall, Richards Farm Oil Co. 2 35
Satterfield, Robert E. Elder 1 ..... dry

ROANE COUNTY

Starcher, Chas. Despart et al 1 ..... gas
Farr, South Eastern Gas Co. 2 ..... gas
Fouty et al, Big Four Drlg. Co. 1 .... dry

WETZEL COUNTY

Wade, Harrison-Ritchie O. & G. Co. 2. gas

WIRT COUNTY

Hall, Glen Roberts 1 1

SOUTHWEST PENNSYLVANIA

WELLS COMPLETED

WASHINGTON COUNTY

Clarke, J. H. Wilson 2 ..... gas
Parker, Jess Moore et al 1 ..... dry
McKennan, E. H. & J. B. Tague 5 15

Indiana Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Gibson	2	160	0	1	0	2	2
Pike	5	0	2	3	0	5	5
Sullivan	0	0	0	0	0	3	3
Daviess	1	0	0	1	0	3	3
Warrick	0	0	0	0	0	1	1
Vigo	0	0	0	0	0	1	1
Spencer	0	0	0	0	0	1	1
Perry	2	0	0	1	1	0	3	3
Greene	0	0	0	0	0	1	1
Knox	1	0	0	1	0	0	0
Harrison	0	0	0	0	0	1	1
Delaware	1	0	0	1	0	0	0
Huntington	0	0	0	0	0	1	1
Jay	1	0	0	1	0	1	1
Randolph	0	0	0	0	0	1	1
Porter	0	0	0	0	0	1	1
Stark	0	0	0	0	0	1	1
Martin	0	0	0	0	1	0	1
Vanderburg	1	15	0	0	0	3	3
Ttl. Aug.	14	175	3	9	1	29	30
Ttl. July	9	0	4	5	4	21	25
Difference	5	175	1	4	3	8	5

WELLS COMPLETED

GIBSON COUNTY

Washington—R. E. Huey, Big Four O. & G. 2 160
Columbia—G. C. Sampley, Knox Engineering Corp. 2 ..... gas
Patoka—J. S. Dickson, Ohio Oil 1 .... abd
John Geiser, Ohio Oil 2 ..... abd
Chas. E. Knight, Ohio Oil Co. 1 .... abd
Wm. F. Knight, Ohio Oil 3 ..... abd
Lucy E. Knight, Ohio Oil 2 ..... abd
J. S. Smith, Ohio Oil 1 ..... abd
Kate Jones, Ohio Oil 1 ..... abd

Wells completed 9
Production 160
Gas 1
Abandoned 11

PIKE COUNTY

Washington—Hugh McCain, Chas. C. Taliaferro, Jr. 1 ..... gas
Wm. Smith, A. V. Burden 3 ..... gas
J. and C. Shea, Harry N. Bell 2 .... gas
Chas. R. Lucas, Harry N. Bell 1 .... dry
Jefferson—Otto Thomas, Indiana Southwestern O. & G. 1 ..... dry
Logan—B. Shafer, H. E. Merrified 1 .. abd

Wells completed 5
Gas 3
Dry 2
Abandoned 1

DAVIESS COUNTY

Harrison—Wm. Moore, Triangle O. & G. 2 ..... gas

PERRY COUNTY

Clark—Delaisee, Conyers & Bugg 1 ... gas
Perry—Claud Hall, W. S. M. Hughes & Co. 1 ..... dry

Wells completed 2
Gas 1
Dry 1

KNOX COUNTY

Busseron—Elsie Hall, Thayer & Lloyd 1 gas

DELAWARE COUNTY

Near Royerton—Geo. Bunner, W. T. Grossman 1 ..... gas

JAY COUNTY

Wayne—F. H. Stoner, N. E. Masters & Co. 1 ..... gas

VANDERBURG COUNTY

Perry—Nick Bassmeier, Henley & Co. 1 15

Illinois Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Clark	2	2	1	0	0	1	1
Crawford	0	0	0	0	1	3	4
Marion	0	0	0	0	0	2	2
Boone	0	0	0	0	0	2	2
Jefferson	0	0	0	0	0	1	1
Jasper	0	0	0	0	0	1	1
Clinton	0	0	0	0	0	1	1
Bond	0	0	0	0	0	1	1
Madison	0	0	0	0	0	1	1
Wabash	1	0	1	0	0	0	0
Ttl. Aug.	3	2	2	0	1	13	14
Ttl. July	2	7	1	0	1	13	14
Difference	1	5	1	0	0	0	0

WELLS COMPLETED

CLARK COUNTY

Parker—H. Briscoe No. 2, J. E. Hood 8 2
N. B. Lee, Martha M. Knierman 8 .. dry

Wells completed 2
Production 2
Dry 1

LAWRENCE COUNTY

Dennison—Friemont School Dist. No. 33, Ohio Oil 1 ..... abd
R. L. Ryan, Ohio Oil 14 ..... abd

WABASH COUNTY

Wabash—C. Keyer, B. F. Wirebach 9 .. dry
W. J. Shick, Ohio Oil 2 ..... abd

Wells completed 1
Dry 1
Abandoned 1

Lima Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Wood	0	0	0	0	0	3	3
Allen	1	10	0	0	0	2	2
Auglaize	0	0	0	0	0	2	2
Mercer	0	0	0	0	0	1	1
Sandusky	0	0	0	0	1	1	2
Lucas	1	0	1	0	0	0	0
Ottawa	0	0	0	0	0	1	1
Seneca	4	0	2	2	0	4	4
Hardin	0	0	0	0	0	1	1
Wyandot	6	215	1	0	0	11	11
Marion	1	0	1	0	0	0	0
Williams	0	0	0	0	0	1	1
Ttl. Aug.	13	225	5	2	1	27	28
Ttl. July	12	320	1	5	2	24	26
Difference	1	95	4	3	1	3	2

WELLS COMPLETED

WOOD COUNTY

Liberty—E. B. Phillips, Ohio Oil 29 abd
Plain—G. W. Hartman, Walter Hartman & Co. 4, 5 ..... abd
Henry—S. Hamman, Ohio Oil 6 ..... abd
B. A. Lawrence "C," Ohio Oil 27 .. abd

Wells abandoned 5

ALLEN COUNTY

Bath—C. A. Hoover, C. A. and F. J. Peavy 8 10

SANDUSKY COUNTY

Scott—P. C. Swickard, D. J. Bonawith 1 ..... abd
Earl & Putnam, Chas. W. Putnam 1, 2, 3 ..... abd
Madison—Garver, Bauman & Holtaeple 1, 2, 3, 4 ..... abd
Woodville—W. H. Bruns No. 2 Gibsonburg Banking Co. No. 3—16 wells abd

Wells abandoned 24

LUCAS COUNTY

Monclova—Chas. B. Holloway, Chas. A. Tanner & Co. 1 ..... dry
Oregon—A. Chesbrough, Joseph Casper, 2 wells ..... abd

Wells completed 1
Dry 1
Abandoned 2

SENECA COUNTY

Hopewell—Wm. H. King, Sandusky O. & G. 1 ..... gas
Clinton—Hattie Martin, Dewey O. & G. 2 ..... dry
Isaac Martin, W. E. Wilson, tr., 2 .. dry
Chas. S. Yingling, Tiffin Industrial Gas 2 ..... gas
Eden—J. C. Yeager, D. R. McCray 8, 10, 12, 13 ..... abd

Wells completed 4
Dry 3
Gas 2
Abandoned 4

WYANDOT COUNTY

Crane—Ira Schoenberger, Ohio Fuel Gas 1 ..... dry
Gotlieb Seiler, Kiner & Co. 1 20
N. and H. Saltzman, Upper Sandusky O. & G. 2 125
Margaret Brillhardt, Jones & Coyle 4 25
O. J. Wieker, Upper Sandusky O. & G. 4 25
Hilderbrandt, Upper Sandusky O. & G. 1 20

Wells completed 6
Production 215
Dry 1

MARION COUNTY

Grand Prairie—E. H. Brown, Lewis-Ennis O. & G. 1 ..... dry

Central Ohio Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Ashland	0	0	0	0	1	2	3
Lorain	3	0	1	2	2	4	6
Medina	3	40	0	0	2	1	3
Wayne	1	0	1	0	1	1	2
Knox	0	0	0	0	1	4	5
Summitt	1	0	0	1	3	3	6
Fairfield	1	0	0	1	1	0	1
Richland	0	0	0	0	0	1	1
Coshocton	1	100	0	0	1	3	4
Licking	4	36	1	0	2	2	4
Muskingum	0	0	0	0	0	7	7
Athens	7	0	5	2	2	6	8
Tuscarawas	0	0	0	0	1	4	5
Trumbull	0	0	0	0	0	1	1
Portage	1	0	1	0	1	1	2
Stark	8	0	2	6	9	24	33
Belmont	4	2	2	1	2	8	10
Guernsey	2	0	0	2	0	4	4
Crawford	0	0	0	0	0	1	1
Gallia	0	0	0	0	0	1	1
Scioto	0	0	0	0	0	1	1
Pike	0	0	0	0	0	2	2
Carroll	0	0	0	0	0	4	4
Columbia	0	0	0	0	0	2	2
Cuyahoga	0	0	0	0	0	2	2
Ttl. Aug.	36	178	13	15	29	88	117
Ttl. July	22	138	6	13	23	88	111
Difference	14	40	7	2	6	0	6

WELLS COMPLETED

LORAIN COUNTY

Eaton—Frank Kavarick, McMillan & Co. 3 ..... gas
Columbia—J. H. Schnable, Ohio Fuel Gas 1-5,720 ..... gas
Pittsfield—H. E. Piper, Dempsey & Co. 1 ..... dry

Wells completed 3
Gas 2
Dry 1

MEDINA COUNTY

Chatham—Richards, O. K. O. & G. Co. 1 10
Litchfield—L. A. Severcool, Kolb & McGrath 4 10
L. A. Severcool, Kolb & McGrath 5 .. 20

Wells completed 3
Production 40

WAYNE COUNTY

Chester—Mary E. Smyser, Faulkner & Phelps 4 ..... dry

SUMMITT COUNTY

Green—John Wenhart, East Ohio Gas 2. gas

FAIRFIELD COUNTY

Pleasants—Andrew Ellinger, City Nat. Gas Works 2 ..... gas

COSHOCTON COUNTY

Perry—Patterson-Crawford, Wiser Oil 1. 100

LICKING COUNTY

Perry—G. W. Smith heirs, Floyd Golden & Co. 7 ..... dry
Mary Ann—J. A. Hughes, Settles Oil Co. 5 2
Fallsburg—G. W. Kreager, Wehrle Gas Co. 1 4
Fern Smith, McClay Bros. 2 30

Wells completed 4
Production 36
Dry 1

ATHENS COUNTY

Berne—Curtis, Carpenter & Glazier 17.. dry
V. V. Tuttle, C. W. Nuzum 1 ..... dry
Lawrence & Co., John Bowman 4 .... gas
Lee—Alvin D. Cline, I. C. Robinson 3.. dry
Dover—Sunday Creek Coal, Ohio Fuel Gas 101-5,722 ..... dry
Cannan—F. E. Halbirt, Stewart & Ross 1 ..... gas
Troy—G. M. Foster, C. & M. O. & G. 1. dry

Wells completed 7
Gas 2
Dry 5

PORTAGE COUNTY

Freedom—Louis V. Miller, McClay Bros. 1 ..... dry

STARK COUNTY

Jackson—E. Harmount, Ohio Fuel Gas 2-5,723 ..... gas
H. Hoverland, Ohio Fuel Gas 1-5,724. gas
J. A. and C. Shook, East Ohio Gas 1 dry
Marlboro—D. and N. Frederick, Brendel Producing Co. 2 ..... dry
Plain—Paul Belden, White & Co. 1 .... gas
T. & H. McDowell, East Ohio Gas 1. gas
Mary E. Kuntze, Ohio Fuel Gas 1-5,725 ..... gas
Hoover Co., Hoover Dev. Co. 2 ..... gas

Wells completed 8
Gas 6
Dry 2

GUERNSEY COUNTY

Madison—A. C. and F. Carlisle, H. P. Muhlbeck & Son 1 ..... dry

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NOTICE OF DIVIDENDS

The Board of Directors of the Deep Oil Development Company of Wichita Falls, Texas, have declared a three per cent dividend on all Stock of record at the Close of business on October 1, 1933. Said Dividend being payable October 15, 1933, at which time checks will be mailed.

HARRY HINES, Vice President.

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TESTIMONIAL

Sept. 9, 1933.

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On Dec. 29, 1932 we installed one of your new improved working barrels on our state line lease well No. FH-4.

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McGREGOR WORKING BARREL CO., INC.

BRADFORD, PENN'A.

Wills—Jas. W. Tipton, Haines Bros. Oil Co. 4 ..... dry

Wells completed 2
Dry 2

BELMONT COUNTY

Somerset—Chas. McLaughlin, King & Tanner 2 2
Richland—Lorain Coal & Dock, Peters & Patterson 1 ..... dry
Carroll & Eberts, Steuben Oil 1 ..... dry
Union—W. L. Boyd, Robt. Morgan & Co. 1 ..... gas

Wells completed 4
Production 2
Gas 1
Dry 2

Michigan Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Midland	18	5,231	5	0	37	55	92
Isabella	6	11,570	1	1	27	17	44
Clare	0	0	0	0	3	1	4
Oceana	0	0	0	0	2	5	7
Lake	0	0	0	0	0	2	2
Iosco	0	0	0	0	1	0	1
Gratiot	0	0	0	0	3	1	4
Cass	0	0	0	0	2	1	3
Kent	0	0	0	0	1	2	3
Emmett	0	0	0	0	0	1	1
Leelanau	0	0	0	0	1	0	1
Saginaw	0	0	0	0	1	1	2
Montmorency	0	0	0	0	3	0	3
Sanilac	0	0	0	0	3	0	3
Mewyago	0	0	0	0	0	2	2
Shiawassee	0	0	0	0	1	3	4
Allegan	0	0	0	0	1	2	3
Livingston	0	0	0	0	1	2	3
Oscola	0	0	0	0	1	0	1
Alpena	0	0	0	0	1	0	1
Cheboygan	0	0	0	0	0	1	1
Oakland	0	0	0	0	0	1	1
Gennessee	0	0	0	0	1	0	1
Mecosta	0	0	0	0	1	0	1
Gladwin	1	310	0	0	0	0	0
Antrim	0	0	0	0	0	1	1
Monroe	0	0	0	0	0	1	1
St. Clair	0	0	0	0	3	0	3
Ogemaw	0	0	0	0	4	0	4
Montcalm	0	0	0	0	1	0	1
Lapeer	0	0	0	0	1	0	1
Muskegon	0	0	0	0	4	8	12
Ttl. Aug.	25	17,111	6	1	104	107	211
Ttl. July	20	6,469	5	1	68	83	151
Difference.	5	10,642	1	0	36	24	60

WELLS COMPLETED

MIDLAND COUNTY

Greendale—Claud Harnick, Thompson Bros. 1 100
Opperman, Stewart-Gordon 6 135
Wm. Travers, Columbia O. & G. 1 .. dry
Vern T. Hastings, R. D. Malcolm 3.. 35
Jos. Yatta, Pure Oil 1 700
Porter—W. and S. Carter, Wm. J. Wilson, tr. 1 800
J. H. Otway, Stork Oil 1 ..... dry
C. and M. L. Acker, A. P. Scheid 1 .. dry
Mina Narmore, Pure Oil 4 300
State-Porter, Pure Oil 2 30
C. L. Baxter, Pure Oil Co. 2 300
Campbell, Theodore Oil 1 600
H. Carter, Stewart-Gordon 1 1150
C. L. Baxter, Fred W. Turner & Co. 1. 306
Muscott & Co., Gordon Oil Co. 2 657
Jasper—Corning, Pure Oil 2 ..... dry
Mount Haley—G. A. Currie, Thompson & Fortney 1 ..... dry
Lee—F. H. Taulker, W. Hunter Atha 1-"A" 118

Wells completed 18
Production 5231
Dry 5

ISABELLA COUNTY

Vernon—A. A. Thayer, Lawson O. & G. 2-"A" 30
John Stough, Mellon-Pollock Oil Co. 1 340
Verrethe, Mammoth Pet. Co. 1 10,000
W. E. Currie, Strange & Flynn 1 .... dry
D. J. Carmichael, J. V. Wickland 2..1200
Broomfield—P. M. Railroad, W. J. Sovereign 2 ..... gas

Wells completed 6
Production 11,579
Gas 1

GLADWIN COUNTY

West Branch—Stella Wilcox, Alvin Weber 1 310

Kentucky Fields

Summary of Field Operations

	Comp.	Prod.	Dry	Gas	Rgs.	Dlg.	Ttl.
Ohio	5	45	3	0	0	12	12
Daviess	12	230	8	0	0	15	15
Hancock	3	5	2	0	0	7	7
McLean	6	59	2	0	0	4	4
Henderson	1	15	0	0	0	0	0
Muhlenberg	1	19	0	0	0	4	4
Madison	0	0	0	0	0	1	1
Taylor	0	0	0	0	0	1	1
Bath	0	0	0	0	0	1	1
Edmonson	0	0	0	0	0	1	1
Grayson	0	0	0	0	1	1	2
Lee	0	0	0	0	0	1	1
Knox	0	0	0	0	0	1	1
Hart	1	0	1	0	0	0	0
Warren	0	0	0	0	0	2	2
Allen	0	0	0	0	1	2	3
Ttl. Aug.	30	373	16	0	2	54	56
Ttl. July	6	15	3	1	3	52	55
Difference.	24	358	13	1	1	2	1

WELLS COMPLETED

OHIO COUNTY

Hartford—Earnest Bickett, Bank of Whitesville 10 25
Earnest Bickett, Bank of Whitesville 11 ..... dry
Tom Westerfield, B. & B. Oil Co. 1.. dry
Wright, White & Calder 1 ..... dry
Burdette, Dewey Huff & Co. 1 20

Wells completed 5
Production 45
Dry 3

DAVIESS COUNTY

Owensboro—Ed Bennett, Thompson, Sargent & Co. 1 ..... dry
J. O. Orick, Three Sands Oil Co. 1 .. dry
M. E. Cravens, Cameron & Thompson 1 ..... dry
Perry Thomas, Courtney Combs & Co. 1 35
R. E. Jackson, Brenner & Adams 5 .. 25
M. Barrett, Johnson O. & R. Co. 1 .. dry
Sam Haynes, Snowden-McSweeney Co. 1 ..... dry
J. W. Richardson, Tracey Supply Co. 6 ..... dry
R. Wilson, Courtney Combs & Co. 1. 100
Rollie Ambrose, I. C. Huff & Co. 1.. 50
Joss Ambrose, I. C. Huff & Co. 1 20
Nettie Meller, Vickers & Co. 1 ..... dry
Chancellor, John Ross & Co. 1 ..... dry

Wells completed 13
Production 230
Dry 8

HANCOCK COUNTY

Pellville—Alfred Wright, Coleman & Wright 1 ..... dry
Wright, Arch Bramberger & Co. 1 .. dry
Fred Sheown, Sands Pet. Corp. 2 5

Wells completed 3
Production 5
Dry 2

McLEAN COUNTY

Calhoun—Ed Wells, Mike Callas & Co. 1 12
L. E. Morris, T. Y. Gregg & Co. 1 .. dry
Albert Burshear, T. Y. Gregg & Co. 1 10
John Spark, J. C. Miller & Co. 1 ..... dry
Ed Scarlotte, Johnson O. & R. Co. 1. 7
W. D. Wright, Hupp & Duff 5 30

Wells completed 6
Production 59
Dry 2

HENDERSON COUNTY

Niagara—S. A. Freeman, Imperial O. & G. Products 6 15

MUHLENBERG COUNTY

Greenville—R. O. Kennedy 45-ac., Mayer Oil Co. 1 19

HART COUNTY

LeGrande—W. B. Perkins, Hillside Oil Producing Co. 11 ..... dry

Veteran Oil Producer Dies in Nowata, Okla.

NOWATA, Okla., Oct. 2.—Matthew McCormick, pioneer operator in the Nowata oil field, died Tuesday, September 26, at his home here, age 73 years.

Born in Oil City, Pa., Mr. McCormick went to the Bradford Field in 1876, shortly after it was opened, and became a tool dresser. He moved to California at the age of 18 and became a driller in the shallow fields around Los Angeles. He was made superintendent of the Pacific Coast Oil Co. before he was of legal age and is asid to have drawn the highest salary of any official along the Pacific Coast.

Mr. McCormick returned to Oil City in 1888 and married Miss Clara McCracken of Franklin. In 1896 he moved westward again, settling in the Indiana oil field where he operated with J. R. Sinclair of Lima, Ohio. In 1906 he and others organized the New State Oil Co. which began operating in the Alluwe and Coody's Bluff Pools, in the Nowata Field. In later years he operated independently in the same field. Mrs. McCormick and one daughter, Mrs. Edith Stevenson, survive. Dan McCormick of Tulsa was a brother of deceased.

Statement of the Ownership, Management, Etc., of
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Known bondholders, mortgagees and other security holders holding 1 per cent or more of the total amount of bonds, mortgages or other securities: None.

JOHN M. EGAN,
General Manager.

Sworn to and subscribed before me this 2nd day of October, 1933.

H. R. BARNETT,
Notary Public.

My commission expires October 3, 1937.